NOPSEMA
Australia's offshore energy regulator

GUIDANCE NOTE

Environment plan content requirement

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Overview

- The Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2023 (the Environment Regulations) require a titleholder to have an accepted environment plan (EP) in place for any petroleum activity or greenhouse gas activity[1].
- The Environment Regulations impose a duty on the titleholder to demonstrate to NOPSEMA in the EP that a proposed activity to be carried on will be carried out in a manner:
    - consistent with the principles of ecologically sustainable development set out in s 3A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act); and
    - by which impacts and risks of the activity will be reduced to as low as reasonably practicable and, separately, that the impacts and risks of the activity will be of an acceptable level.
- A submitted EP *must* demonstrate that the titleholder has considered the broad definition of the environment in r 5 of the Environment Regulations, and any changes to the environment, whether adverse or beneficial, that wholly or partially results from a proposed activity. The environment in this sense will extend beyond the operational area of the proposed activity. The EP must also demonstrate that the titleholder has carried out the consultations required by Div 3 of the Environment Regulations.
- This guidance note interprets the EP content requirements that need to be met and demonstrated under the Environment Regulations. Consistent with an objective-based regime, the particular way these requirements will be met should be determined by the titleholder in a manner that best suits their internal and external context, which may include the titleholder's policies, processes, systems, operating environment, economic constraints, stakeholder needs and regulatory requirements.
- The Guidance focuses on providing advice in relation to EP content requirements, the regulatory intent of content requirements, core concepts that are fundamental to each key content requirement and associated EP content considerations.
- Section 3 of this guidance provides detailed advice on the information to be contained in an Environment Plan that is particularly important in relation to NOPSEMA's assessment in accordance with the EP acceptance criteria set out in regulation 34 of the Environment Regulations.
- This guidance note should be read in conjunction with NOPSEMA's Environment plan assessment policy (N-04750-PL1347), Guideline - Environment plan decision making (N-04750-GL1721) and Guideline - Consultation in the course of preparing an environment plan(N-04750-GL2086).
- This Guidance is not intended to provide legal advice or regulatory assessment criteria. None of the views expressed in this document should be treated as a substitute for legal advice.

[1] While this guidance note refers predominantly to petroleum activities, all concepts are equally applicable to greenhouse gas activities.

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Abbreviations and acronyms

ALARP	As low as reasonably practicable
AMSA	Australian Maritime Safety Authority
AMP	Australian marine park
DoEE	Department of Environment and Energy
EMS	Environmental management system
Environment Regulations	Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2023
EP	Environment Plan
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
EPO	Environmental performance outcome
EPS	Environmental performance standard
ESD	Ecologically sustainable development
OPEP	Oil pollution emergency plan
OPGGS Act	*Offshore Petroleum and Greenhouse Gas Storage Act 2006*
OPP	Offshore Project Proposal

1. Purpose and scope

The purpose of this guidance note is to assist stakeholders in understanding the requirements for preparing and submitting an EP for assessment. It applies solely to environment plan submissions made to NOPSEMA under the Environment Regulations.

The guidance note reflects NOPSEMA's interpretation of the EP content requirements of the Environment Regulations to support titleholder's in the preparation of EPs and is not authoritative. This guidance is not authoritative, a substitute for legal advice or detailed consideration of the OPGGS Act and relevant regulations.

This guidance note should be read in conjunction with NOPSEMA's Environment plan assessment policy (N-04750-PL1347) and Environment plan decision making guideline (N-04750-GL1721).

References to regulations in this guidance note refer to the Environment Regulations unless otherwise specified.

2. Background

2.1. What is an environment plan

The overarching purpose of an EP is for the titleholder to document their case for why their petroleum or greenhouse gas activity meets the objects of the Environment Regulations[2]. It is a document that applies environmental risk and impact evaluation to determine the environmental management frameworks and commitments that will need to be implemented to meet the objects of the Regulations.

An EP is a document submitted to NOPSEMA for assessment prior to the commencement of an activity, which contains information on environmental assessment, implementation of environmental management, details of the titleholder and other information specified in Division 5 of the Environment Regulations.

The Environment Regulations require a titleholder to have an accepted EP in place prior to undertaking any offshore petroleum or greenhouse gas activity, and require that the titleholder undertakes the activity in accordance with the EP.

2.2. When is an environment plan required

An accepted EP is required for all offshore petroleum and greenhouse gas storage activities, which are defined in the Environment Regulations as operations or works in an offshore area undertaken for the purpose of exercising a right, or discharging an obligation, of a title or legislative instrument[3].

2.3. Recognised standards for a systematic approach

The Environment Regulations are consistent with recognised standards and systems including the approaches adopted by ISO and AS/NZS standards and guidance, in particular AS/NZS ISO 31000: Risk management – Principles and guidelines (framework overview in Figure 1), and AS/NZS ISO 14001: Environmental management systems – Requirements with guidance for use (framework overview in Figure 2). As a result, these standards are referred to throughout this guidance note to assist with the consistent and robust application of the concepts, processes and elements embodied in the Environment Regulations.

[2] Environment Regulations, regulation 4
[3] For more information on petroleum and greenhouse gas activities requiring EPs, see NOPSEMA's Petroleum activity guidance note (N-04750-GN1343).

Reference to these standards also provides titleholders with access to a large body of available guidance. Adopting the process described in these standards during the preparation of an EP will provide a good basis for addressing the requirements of the Environment Regulations.

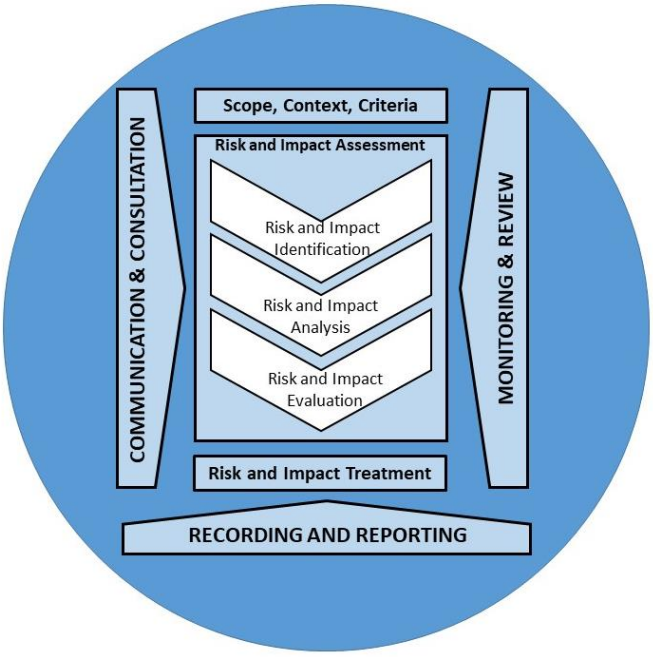

Figure 1: Adapted from AS/NZS ISO 31000 – 2018 Risk Management Guidelines

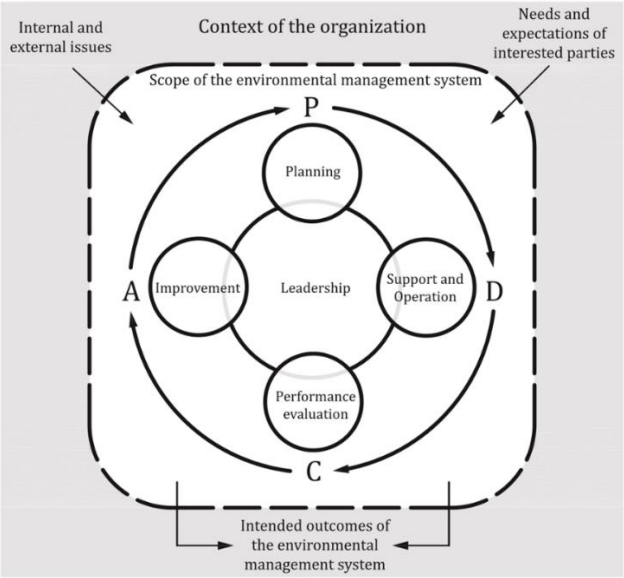

Figure 2: Adopted from ASNZ – ISO 14001 – 2016 Environmental management systems – Requirements with guidance for use[4]

[4] To interpret Figure 2 refer to AN/NZ Standard 14001: P = Plan - Establish environmental objectives and processes necessary to deliver results in accordance with the organisation's environmental policy; D =- Do – implement the processes as planed; C = Check – monitor and measure processes against the environmental policy including its commitments, environmental objectives and operating criteria and report results; A = Act- Take actions to continually improve.

2.4. Who can submit an environment plan?

EPs may be submitted to NOPSEMA by titleholders of petroleum titles and by some title applicants. Titleholders are defined in the Environment Regulations and include petroleum exploration permittees, petroleum retention lessees, petroleum production licensees, greenhouse gas assessment permittees and greenhouse gas injection licensees, amongst other permit holders. The titleholder of the activity retains responsibility under the OPGGS Act and the Environment Regulations during the EP assessment and throughout the life of the activity.

The Environment Regulations also allow applicants for certain exploration and infrastructure titles to submit an EP, prior to grant of the title. The 'applicant' is taken to be the 'titleholder' for the purposes of preparation, submission and acceptance of an EP. Wherever this document refers to titleholders, the information is also applicable to applicants.

Titleholders proposing to conduct an activity that is, or is part of, an 'offshore project'[5] as defined by the Environment Regulations cannot submit an EP, unless:

- NOPSEMA has already accepted an 'offshore project proposal' (OPP) that includes that activity, or
- The Environment Minister has provided a relevant decision or approval under the EPBC Act.

2.5. EP content and process overview

Division 5 of the Environment Regulations is consistent with the principles of risk management systems developed by recognised bodies such as ISO and AS/NZS as discussed above in section 2.3. Meeting the content requirements for an EP provides assurance that impacts and risks are being appropriately managed, noting that the content requirements align with the EP acceptance criteria[6]. Consequently, the EP assessment and acceptance process is conducted with consideration of the content requirements for an EP detailed in regulations 21, 22, 23 and 24. These content requirements are summarised below:

- The EP must **describe** the activity, environment, regulatory and other requirements, and acceptable levels for impacts and risks.
- The EP must **detail** impacts and risks of the activity, which includes identifying sources of impacts and risks, the related events and their causes. It also includes analysis of the likelihood and consequence of those impacts and risks.
- The EP must **evaluate** impacts and risks (including direct and indirect impacts from operational and potential emergency conditions), **detail** the control measures that will be used to reduce impacts and risks, and **demonstrate** that they are reduced to ALARP and acceptable levels.
- The EP must **define** the environmental performance outcomes and set the environmental performance standards against which the environmental performance of the titleholder is to be measured during the activity. The EP must also include measurement criteria that will allow the titleholder and NOPSEMA to determine if the performance outcomes and performance standards have been met.

[5] Further information on OPPs is available in NOPSEMA's Offshore project proposal assessment policy (N-04790-PL1650).
[6] Environment Regulations, regulation 34. Refer to section 4 of this guidance which relates EP Content Requirements to EP Acceptance Criteria

- For seismic and exploratory drilling EPs that have undergone public comment, the EP must demonstrate that **modifications to the content of an EP have been made to adequately address public comments,** where public comments have merit, are credible, and are relevant[7] to the activity.
- The EP must **demonstrate** that the titleholder has carried out the consultation process required by Div 3 of the Environment Regulations including a description of the **consultation process** undertaken with relevant persons during the preparation of an EP, the appropriate measures (if any) adopted or proposed to be adopted arising from the consultation, and that there is provision for ongoing consultation. It will not generally be sufficient for an EP to simply indicate the relevant persons who the titleholder has consulted with. Rather, the EP must contain sufficient information for NOPSEMA to be reasonably satisfied that each relevant person (being those detailed in reg 25(1)) has been identified and meaningfully consulted by the titleholder. This will need to include a rationale of how the functions, interests and activities of persons/organisations that are affected have been determined, and how the consultation process was adapted by the titleholder to ensure that consultation was in accordance with the minimum requirements set out in regs 25(2)-(4). Titleholders should read the phrase "functions, interests or activities" in reg 25 broadly.
- The EP must include an appropriate **implementation strategy** that provides a systematic approach, to ensure the environmental performance outcomes and environmental performance standards of the plan are met and are monitored on an ongoing basis. The implementation strategy must describe the environmental management system for the activity, that will ensure that impacts and risks will be continuously identified and reduced to ALARP, and that requirements of the Environment Regulations are met.
- As well as the core requirements discussed above, the EP must also include details for relevant **liaison persons** and **additional content requirements** as prescribed by the Environment Regulations.

Each of the EP content requirements within the Environment Regulations link together to form a coherent system. The Environment Regulations reflect the 'plan – do – check – act' cycle that is the basis of a systematic approach to environmental management under AS/NZ ISO 14001; where the 'plan' relates to preparation of an EP and the 'do, check, act' components relate to the implementation of the EP for the duration of the activity. The regulatory process and EP content requirements provide a framework that allows titleholders to apply a systematic approach to meeting the EP content requirements of the Environment Regulations.

Figure 3 below identifies the content of an EP (and the corresponding section references of this document) and illustrates how these may be applied within the systematic approach described within AS/NZ ISO 31000 and AS/NZS ISO 14001. It should be noted that many of these steps are related and iterative and due to their complexity these relationships have not been comprehensively illustrated in Figure 3. However, these considerations have been discussed within the corresponding document sections referenced within Figure 3.

2.6. Transparency of assessment process

In April 2019, to improve transparency in the EP assessment process, the Environment Regulations were amended to require the publication of all EPs and a mandatory public comment period for seismic and exploratory drilling EPs. These provisions include specific requirements for environment plans to be

[7] For seismic and exploratory drilling activities, the titleholder is required to prepare a report on public comment which is to set out how the EP has been modified to take into account public comments. Refer to the GN1847 – Responding to public comments guidance note and FM1846 – Titleholder report on public comment form for further guidance.

published in full at key stages during the assessment process, and for seismic and exploratory drilling EPs to undergo a 30-day public comment period prior to assessment by NOPSEMA.

To facilitate these regulatory requirements and enable publication to NOPSEMA's website, NOPSEMA requires EPs to be submitted in a form suitable for publication, which is described in the Making submissions to NOPSEMA guideline (N-04000-GL0225) and NOPSEMA's Assessment Policy (N-04750-PL1347). This includes ensuring that 'sensitive information' (defined in regulation 5) is included in a separate part of the EP that will not be published to NOPSEMA's website.

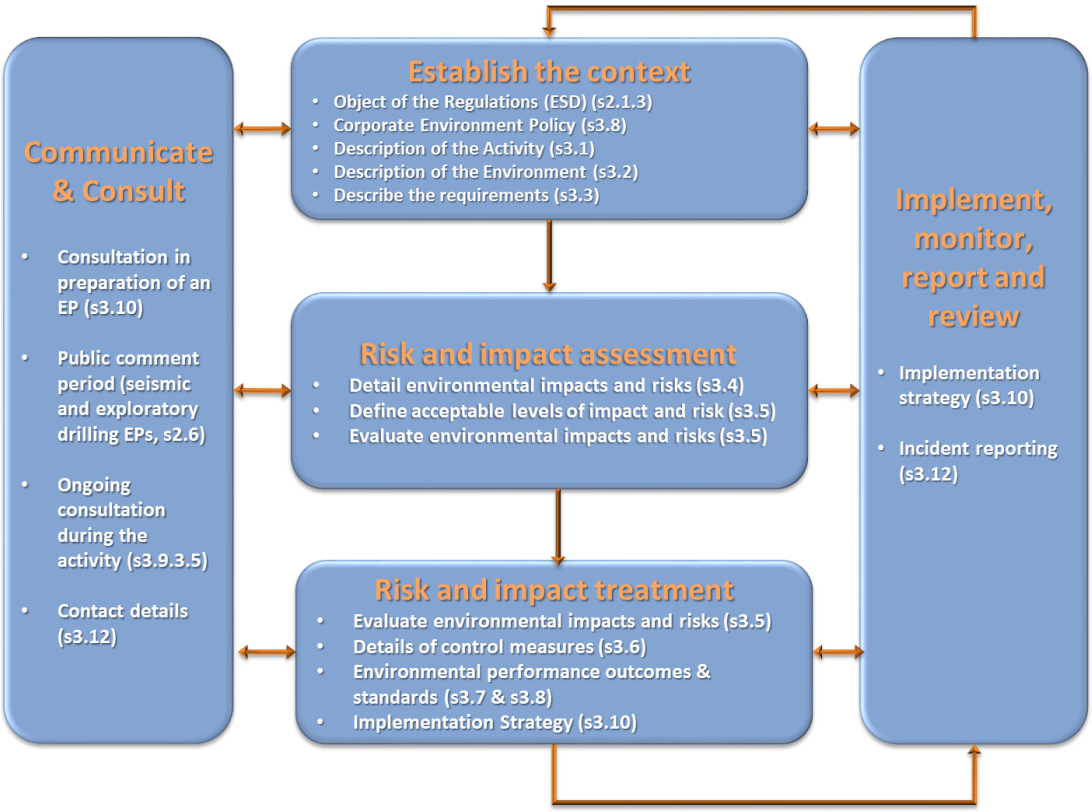

Figure 3: The content requirements for an EP consistent with the framework outlined in AS/NZS ISO 31000.

In addition, titleholders are advised to present EP content in a clear and logical manner aligning with content requirements of the regulations to facilitate public comment and support NOPSEMA's completeness check undertaken prior to EP publication.

An outline of the assessment process, including points of publication and public comment, is provided in Appendix A[8].

Following the public comment period, titleholders are required to prepare a report on public comment using NOPSEMA's public comment report template. While this report is not part of the EP, it is NOPSEMA's expectation that the report clearly identifies where the EP has been modified to address the comments made[9].

[8] For more information on the assessment and decision making process for EPs see NOPSEMA's Environment plan assessment policy (N-04750-PL1347) and Environment plan decision making guideline (N-04750-GL1721)
[9] ((N-04750-PL1347 – Environment Assessment Policy, FM1846 - Titleholder report on public comment, GN1847 – Responding to public comment).

The titleholder may use regulation 56 to refer to information that they have previously given to NOPSEMA as long as it directly relates to an EP content requirement, is publicly available and clearly identifies the specific source of this information. For example, specifies the document name, document reference number, revision number and/or date and where required, refer to the specific section(s), pages or similar where the information is contained.

3. Environment plan content requirements

3.1. Description of the activity

Applicable regulations
Regulation 5 – Definitions (activity, facility) **subregulation 34(a) Appropriate for the nature and scale of the activity** **subregulation 21(1) Description of an activity**

3.1.1. Regulatory purpose

- To provide context about the activity, and parts of the activity that interact with the environment, in order to inform the identification and evaluation of environmental impacts and risks.

3.1.2. Core concept

- The EP must contain a comprehensive description of the activity including details of each activity and stage, general details and layout of the facilities, operational details and proposed timetables at a level of detail that enables environmental impacts and risks of the activity to be identified and evaluated.
- The scope and bounds of the activity should be described clearly in the EP, such as the extent and duration of the activity, operational schedule and plan, and activity timetables, so that there is certainty regarding the activity proposed. Where an activity is not described, these activity components will not form part of the EP acceptance and may require a revision to the EP[10].

3.1.3. Considerations

- The description of each component or stage of the activity should enable members of the public and relevant persons to understand the activity and how it may affect their activities or interests.
- A comprehensive description of the activity and its components that is relevant to the environmental risk identification and evaluation, is important for providing the basis for demonstrating that all potential environmental impacts and risks, including potential cumulative impacts, have been appropriately detailed and evaluated.
- The description of the activity is to contain:
    - the location of the activity, including a high quality map with the following contextual information: the area where the activity is proposed to occur, the nearest shorelines (islands or mainland), the nearest protected areas (e.g. Australian Marine Parks, World Heritage Areas), and bathymetric contours of at least 100m spacing

[10] See N-04750-GL1601 – When to submit a proposed revision of an environment plan

- general details of the construction and layout of any facilities or infrastructure involved in the activity/s, which may include floating vessels, platforms, subsea equipment, wells and/or pipelines.
- an outline of the operational details of the activity/s, describing what the titleholder intends to do and providing a timetable, including proposed start and end dates where relevant (for short-term activities).
- any additional information relevant to the consideration of environmental impacts and risks of the activity including descriptions of the target hydrocarbon and its physical/chemical characteristics, any emissions and discharges to the ocean or air, and specific to production activities, an outline of the production history and projected future of the oil field to provide context to the current environment plan.

3.2. Description of the environment

Applicable regulations
Regulation 5 – Definitions (environment) **34(a) Appropriate for the nature and scale of the activity** **Regulation 21(2) and 21(3) – Description of the Environment**

3.2.1. Regulatory purpose

- To provide adequate information about the environment that may be affected by the activity in sufficient detail to inform the evaluation of environmental impacts and risks. This includes the environment that may be affected by planned components of the activities, and the area that may be exposed to hydrocarbons in the event of a hydrocarbon spill.
- To adequately define the environment that may be exposed to hydrocarbons in the event of a significant incident and the geographic extent of response and monitoring activities.
- To enable relevant persons to understand the environment[11], including (amongst other things) people and communities, the heritage value of places, and their social and cultural features which may be affected by a titleholder's proposed activities.

3.2.2. Core concepts

- The EP must describe the existing environment that may be affected by the activity[12]. This includes the environment that may be affected by planned (e.g. produced water) and unplanned (e.g. oil spills) components of the activity. The 'environment' is defined in regulation 5.
- The description of the environment must include details of the particular relevant values and sensitivities of the environment where the activity is proposed, including (but not limited to) matters protected under Part 3 of the EPBC Act that will or may be affected by the activity[13].

[11] As defined under regulation 5
[12] Environment Regulations, subregulation 21(2)
[13] Protected matters under Part 3 of the EPBC Act are defined as: the world heritage values of a declared World Heritage property;
- the national heritage values of a National Heritage place;
- the ecological character of a declared Ramsar wetland;
- the presence of a listed threatened species or listed threatened ecological community;
- the presence of a listed migratory species;
- the values and sensitivities that exist in, or in relation to, the Commonwealth marine area or Commonwealth land .

- The values and sensitivities of the environment that may be affected are relevant for determining the acceptable levels of impact ahead of the impact evaluation process[14] and in developing appropriate environmental performance outcomes (EPOs; refer to section 3.7).
- If the activity is within or has the potential to impact on an Australian Marine Park (AMP), the EP must describe the values, including the representative values of the park(s) that may be affected[15].

  The level of detail within the plan should be appropriately scaled to the nature of the impacts and risks to the particular values and sensitivities. For example, the environment that may be affected by planned operations will need to be described in a greater level of detail than areas exposed to low levels of hydrocarbon in the unlikely event of a worst-case hydrocarbon release.

3.2.3. Considerations

- The description of the environment applies to ecological, socio-economic and cultural features of the environment including natural and physical resources and the qualities and characteristics of locations, places and areas.
- In the description of matters protected under Part 3 of the EPBC Act, including their values and sensitivities, it should be clear how the titleholder has had regard to the relevant management documentation published by the Department of Environment and Energy (DoEE). The general types of management documentation that should be reviewed and referenced are set out in Appendix B and the Program Report[16].
- The social and economic features of the environment may include commercial and recreational fishing, shipping, tourism, other petroleum, industrial or maritime developments. These should be described to allow for consideration of interactions with the activity and potential cumulative impacts, and may be informed during consultation with relevant persons.
- The cultural features of the environment may include heritage sites, and values relating to First Nations people's traditional culture and customs, as well as shipwrecks, sunken aircraft and other types of underwater heritage and their associated artefacts.
- Those features of the environment that may influence the activity or the impacts of the activity should also be described (e.g. ocean currents, prevailing winds).
- Consultation with relevant persons should be seen as an opportunity to obtain further information about the environment and inform the subsequent identification and evaluation of environmental impacts and risks.
- Publicly-available studies, data and reports should be reviewed to compile the description of the environment, and must be accurately referenced in the environment plan.
- Consideration should be given to reliability, bias and any uncertainties associated with the information being referenced. The effort applied to addressing reliability and uncertainty should be directly proportionate to the significance of that information to the risk evaluation process.

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[14] See section 3.5.2 of this Policy
[15] Further information on considerations relevant to Petroleum activities and Australian marine parks is provided in the guidance note Petroleum activities and Australian Marine Parks (N-04750-GN1785).
[16] Program Report – Strategic Assessment of the environmental management authorisation process for petroleum and greenhouse gas storage activities administered by the National Offshore Safety and Environmental Management Authority under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006,* February 2014.

- Any relevant shortcomings in the information, or the level of information about the existing environment may need to be addressed with appropriate sources of information, additional field surveys or studies. Consideration should be given to the type and currency and applicability of environmental baseline information that may be necessary to measure environmental performance during the implementation phase of the activity.
- Environmental information that is not specifically link to the activity location (i.e. information from a similar environment elsewhere) may inform the description of the existing environment that may be affected where the titleholder is able to make a well-founded case for relevance.

3.3. Describe the requirements

Applicable regulations
subregulation 21(4) - Requirements **subregulation 34(a)(c) and (h) – Criteria for acceptance of environment plan**

3.3.1. Regulatory purpose

To ensure that legislative and other environmental requirements that apply to the activity are adequately taken into account in the EP and provide important context for the evaluation of environmental impacts and risks.

3.3.2. Core concepts

- The requirements that apply to the activity include all laws, other approvals and conditions, standards or other environmental requirements that apply to the activity's environmental management.
- Requirements could include: relevant laws, codes, standards, agreements, treaties, conventions or practices (in whole or in part), that apply to the jurisdiction in which the activity takes place.
- The description of requirements should explain how the requirements are relevant to the activity in the EP and specifically how they apply to the activity.
- Relevant requirements to be addressed may also include conditions under the EPBC Act or other relevant approvals under other legislation.
- The description of 'requirements' forms part of the context of the activity and may influence the definition of acceptable levels of impacts and risks for the activity and should be taken into account when determining the acceptable level of impact and subsequently in developing EPOs.
- Management plans for Australian Marine Parks are relevant requirements for activities that are within, or may affect the parks and must be described in a manner that clarifies how the EP will not be inconsistent with requirements of management plans[17].
- Statutory recovery plans for threatened species listed under Part 3 of the EPBC Act are also relevant requirements for activities that have potential to impact on threatened species and the EP must demonstrate how the activity will not be inconsistent with the recovery plan.

[17] Titleholders may refer to the Petroleum activities and Australian marine parks guidance note (N-04750-GN1785) for information.

3.3.3. Considerations

- Where an activity may have impacts on matters protected under Part 3 of the EPBC Act, the management plans and policies that apply to these matters should be identified as relevant requirements and reviewed to identify any specific requirements that may be relevant to the activity.
- Where no approved plan of management is in place for a World Heritage property, National Heritage place, or Ramsar wetland, the management principles of those places apply (in relevant international agreements and the EPBC Act).
- For listed threatened species and ecological communities that may be affected, the relevant statutory recovery plans and threat abatement plans (where these are in place for those species and communities) are relevant requirements.
- Requirements that are not relevant to the environmental management of the activity do not need to be included in the EP.

3.4. Details of environmental impacts and risks

Applicable regulations
Regulation 5 – Definitions (environmental impact, control measure) **subregulation 34(b)&(c) – Criteria for acceptance of environment plan** **subregulations 21(5) and 21(6) – Evaluation of environmental impacts and risks**

3.4.1. Regulatory purpose

- To demonstrate that the titleholder has a thorough understanding of the environmental impacts and risks, including their sources, potential events, likelihood and consequences, confidence levels and also to estimate the magnitude of impacts and risks.
- To inform environmental impact and risk management for the purpose of environmental protection, including oil spill preparedness and response where relevant.
- To make an evidence based case that environmental impacts and risks will be of an acceptable level and reduced to as low as reasonably practicable (ALARP).

3.4.2. Core Concepts

- 'Environmental impact' means any change to the environment, whether adverse or beneficial, that wholly or partially results from an activity of a titleholder (regulation 5).
- There is a distinction between environmental impacts and risks. Environmental impacts are planned as they are an inherent part of the activity. For example, acoustic discharges are an impact on the environment from a seismic survey. This planned emission of noise cannot be avoided for the activity to have purpose.
- 'Details' of the environmental impacts and risks means identifying, including, describing and analysing all impacts and risks that are relevant to the activity.
- A reasonable basis for the identification of the environmental impacts and risks is to be provided.

3.4.3. Considerations

- A robust environmental risk and impact assessment method should be applied consistently that addresses all components of the activity description and existing environment in order to identify and detail all relevant environmental impacts and risks.
- The level of detail provided in the EP should be considered commensurate to the significance and uncertainty associated with the impact or risk, and the amount of interest expressed by relevant persons and members of the public[18] regarding that impact or risk.
- The environment that may be affected by the risk or impact will have been defined to establish the context for the activity. Environmental features (e.g. receptors) are a specific component of the environment and should be detailed in relation to each impact and risk.
- Identifying the potential sources of impacts and risks involves identifying hazards associated with the activity and the mechanisms by which potential events can lead to impacts on the environment. In the extremes these may be short, one-off occurrences (e.g. oil spill) or long term and ongoing (e.g. noise).
- There may be multiple environmental effects from any one hazard, associated with the activity and it is important that the potential effects of these impacts and risks are identified and detailed, for example underwater noise may potentially impact on behaviour, reproductive life stages, multiple trophic levels, or recreational amenity.
- Impact and risk identification should include consideration of potential cumulative impacts and risks for the activity.
- NOPSEMA has prepared guidance to support the preparation of EPs that involve acoustic emissions impacts (which is particularly relevant to the preparation of EPs for seismic surveys)[19] and oil spill risks (which is particularly relevant, though not exclusive to, drilling and production EPs)[20].

3.5. Evaluation of environmental impacts and risks

Applicable regulations
Regulation 5 – Definitions (environmental impact, control measure) **subregulation 34(a) (b) and (c) – Criteria for acceptance of environment plan** **subregulations 21(5)(6) – Evaluation of environmental impacts and risks**

3.5.1. Regulatory purpose

- To document the analysis undertaken to establish the environmental impacts and risks in terms of their extent, duration, severity, and certainty in order to demonstrate that the activity can be undertaken in such a way that the environmental impacts and risks will be managed to an acceptable level and to as low as reasonably practicable (ALARP).
- To ensure that the evaluation of impacts and risks is appropriate to the nature and scale of the activity, so that a greater evidence base / robust supporting information is applied in understanding and

[18] During the public comment process for seismic and exploratory drilling activities
[19] N-04750-IP1765 – Information Paper - Acoustic impact evaluation and management
[20] N-04750-GN1488 – Guidance Note – Oil pollution risk management

managing impacts and risks of those activities that have potential for significant environmental effects on sensitive environments.

3.5.2. Core concepts

- The overarching purpose of an EP is for the titleholder to document their case for why their petroleum activity meets the objects of the Regulations and can be managed to ALARP and acceptable levels. The foundation of this case is the evaluation of environmental impacts and risks.
- The first step in the evaluation process is to establish the acceptable levels of impact and risk that apply to the activity which will form a key environmental performance benchmark for the activity.
- An 'acceptable level' is the specified amount of environmental impact and risk that an activity may have which is tolerable, is consistent with all relevant principles, and does not compromise the management/conservation/protection objectives of the environment.
- All impacts and risks to the environment resulting from all components of the activity need to be detailed and evaluated, including cumulative impacts and risks to demonstrate that the acceptable levels of impact will not be exceeded.
- 'Evaluating' environmental impacts and risks involves comparing the predicted levels against the defined acceptable levels of environmental impact and or 'tolerable' levels of risk to support decision making regarding acceptability of the activity and the need for additional or different management action.
- To demonstrate that impacts and risks have been reduced to ALARP, the EP must document the titleholder's evaluation of the magnitude of the impact or risk reduction relative to the cost of achieving that reduction.
- The evaluation should acknowledge uncertainty in predictions of environmental impacts and where necessary consider the application of adaptive management principles to ensure that the principles of ESD[21] can be achieved.
- The evaluation of risks should contemplate likelihood and consequence as separate constituents to be treated independently. Adoption of control measures should show how both likelihood and consequence will be reduced.
- The evaluation should include consideration all the parameters of control measure performance. This is particularly important when a control measure can be designed to perform to different levels.

3.5.3. Considerations

- Internationally recognised risk assessment processes are appropriate methods to apply when evaluating impacts and risks[22].
- To define the acceptable level of impacts and risks a titleholder should have regard to all relevant context including, but not limited to:
    - Principles of ESD

[21] Principles of ESD are outlined in section 30A of the EPBC Act
[22] AS/NZS ISO 31000: Risk management – Principles and guidelines and AS/NZS ISO 14001: Environmental management systems – Requirements with guidance for use

  - other requirements (e.g. laws, policies, standards, conventions, statutory instruments such as recovery plans for threatened species, plans of management for protected places)[23]
  - internal context (e.g. consistent with corporate environmental policy, culture and company standards)
  - external context (the environment and stakeholder expectations e.g. information acquired during relevant persons consultation and/or the public comment process[24]
  - guidance given in AS/NZS ISO 31000:2018 and HB 203:2012 for defining risk criteria may be considered when defining acceptable levels
  - best practice found in internationally recognized industry guidance, such as that published by the International Petroleum Industry Environmental Conservation Association (IPIECA) for oil spill risks[25].
- Evaluation of impacts and risks may be undertaken using a mix of the following methods
  - adherence to an environmental standard /method / code or document of standing
  - good practice and professional judgement
  - quantitative discussion and analysis
  - semi-qualitative basic numerical analysis
  - qualitative analysis such as predictive modelling.
- The evaluation of risks should address likelihood and consequence as separate constituents to be treated independently. Adoption of control measures should show how both likelihood and consequence will be reduced (where the consequence is the extent, duration, severity and certainty of what would happen should prevention control measures fail).
- The predicted level of impact and risk should be evaluated against the previously defined acceptable levels to determine if they can be met, or if additional management may be required to further reduce the impact or risk so that they do not exceed the acceptable level.
- To demonstrate that an acceptable level of impact or risk has been met, the evaluation is to demonstrate that the defined acceptable level has been met and that the EPO can be achieved (refer to section 3.7). The evaluation of the impacts and risks should include consideration of the existing control measures in place and an evaluation to determine if a risk requires further treatment (e.g. elimination, prevention, reduction and mitigation) to meet the defined acceptable level.
- The evaluation should document the facts and reasons that support the choices and decisions about consideration, rejection and adoption of control measures that reduce environmental impacts and risks.
- The nature and detail of the evaluation provided should be considered in regard to the significance and uncertainty associated with the impact or risk, and the level of concern raised by relevant persons.

[23] Refer to Appendix B for further guidance on relevant documentation for informing acceptable levels
[24] A formal 30 day public comment period applies to all seismic and exploratory drilling EPs
[25] See, for example, "Oil spill risk assessment and response planning for offshore installations", OGP and IPIECA, 2013

- Where confidence in the available information is low, additional studies may be required to inform the impact and risk evaluation or to test assumptions made. Examples include baseline studies, receptor impact studies and modelling of emissions and discharges.

3.6. Details of the control measures to be used

Applicable regulations
Regulation 5 – Definitions (control measure) **subregulation 34(b) and (c) – Criteria for acceptance of environment plan** **subregulations 21(5)(c) – Details of control measures used to reduce environmental impacts and risks**

3.6.1. Regulatory purpose

- To define the systems, procedures, items of equipment, or persons that will be used to reduce environmental impacts and risks to ALARP and acceptable levels including those specific measures required to ensure that the EPO(s) will be met.

3.6.2. Core concepts

- Control measures are adopted to manage the environmental impacts and risks of the activity to ALARP and acceptable levels and must be detailed in the EP.
- Control measures adopted to manage impacts and risks, including those associated with potential emergency conditions, may result in additional or modified impacts and risks. These impacts and risks should be detailed and evaluated in the same manner as impacts and risks from the activity.
- Control measures should be understood in terms of their effectiveness. This will include consideration of a range of factors including their functionality, availability, reliability, independence, survivability, compatibility, maintainability, benefit and cost, and their ability to reduce risk.
- The description of control measures should clearly demonstrate how they will function to ensure that the EPOs (informed by the acceptable level of impact or risk) will be achieved.

3.6.3. Considerations

- Control measures can include the physical features of an activity, facility, or vessel, and elements of the environmental management system employed by the titleholder, that eliminate, prevent, reduce or mitigate the occurrence of an environmental impact or risk.
- The EP should include consideration of the key parameters of control measure performance to inform the establishment of appropriate EPSs.
- Information that is required to make a case for whether control measures are, or are not grossly disproportionate to the benefit gained is an essential step in demonstrating that impacts and risks of an activity are ALARP. In some cases it may be necessary to detail the costs involved and provide a robust analysis to demonstrate that the costs are grossly disproportionate to environmental benefit gained for the life of the activity.

- In cases where there is a low level of confidence in the ability of certain to effectively manage impacts to an acceptable level, there may be a case for impact verification studies and / or an adaptive management approach.
- Relevant information acquired during relevant persons consultation and / or the public comment period for seismic and exploratory drilling activities may be used to inform the need for or design of control measures.

3.7. Environmental performance outcomes

Applicable regulations
Regulation 5 – Definitions (environmental performance, environmental performance outcome) **subregulation 21(7) – Environmental performance outcomes and standards**

3.7.1. Regulatory purpose

To articulate the specific and measurable benchmarks for environmental performance that titleholders are seeking achieve for the life of the activity.

3.7.2. Core concepts

- The EPOs are to:
  - be consistent with the principles of ESD as defined in section 3A of the EPBC Act
  - be consistent with relevant requirements including legislative requirements, plans of management and other statutory instruments applicable to the environmental management of the activity
  - be relevant to identified environmental impacts and risks for the activity
  - demonstrate that impacts and risks will be managed to an acceptable levelset a measurable level against which the environmental performance of the titleholder can be assessed.
- The EPO is one of the means by which the objects of the Regulations are achieved.
- The EPO(s) should be equivalent to or better than the acceptable level(s) of environmental impact and risk from an activity. In this way EPOs are used in environmental impact assessment and management as a key criterion to enable management response prior to the acceptable level being exceeded. An EPO framework is provided in Attachment A of GN1663 – OPP Contents requirements guidance note.
- During activity implementation, the environmental performance of the titleholder is measured by their ability to achieve the EPOs (and standards, refer to section 3.8).
- EPOs in an EP must be consistent with, although necessarily limited in number to those set out in the relevant OPP approval where one is applicable to the activity.

3.7.3. Considerations

- The acceptable level(s) of environmental impact and risk needs to be clearly defined before the EPO(s) can be drafted and the evaluation of those impacts and risks can take place.

- The level of environmental performance articulated through the EPOs should be consistent with the company's organisational environmental objectives, Commonwealth government environmental objectives and any objectives set for individual environment receptors such as protected marine species.
- EPOs that relate to environmental impacts, are to address the specific environmental features or receptors that may be affected by the activity and should be equal to or better than the defined acceptable level of environmental impact for those features or receptors.
- EPOs should reflect the intrinsic value of the features of the environment that may be affected. For example, an EPO for features that are highly valued/protected should reflect a more protective outcome than the EPO for other less valued / protected features.
- EPOs that relate to environmental risk, should demonstrate a commitment by the titleholder to ensure that the risk in question will not be realised. For example for a drilling activity, a commitment to prevent a loss of well control would be appropriate.
- Where the EP identifies potential impacts or risk to matters protected under Part 3 of the EPBC Act, in defining EPOs relevant to those matters, titleholders are to have regard to and ensure consistency with broader environmental objectives such as NOPSEMA's Program commitments and the relevant EPBC Act policy and management documentation[26].
- The EP should include specific control measures that will be implemented to demonstrate that the EPO can be met. This is particularly important for EPOs that have a specific level of environmental performance needed to demonstrate that the activity will be of an acceptable level (e.g. preventing injury to individual members of a population or preventing their displacement from important habitat as required by a recovery plan).

3.8. Environmental performance standards

Applicable regulations
Regulation 5 - Definitions (environmental performance, environmental performance standard and recordable incident) **subregulation 34(d) – Criteria for acceptance of environment plan** **subregulation 21(7)(b) – Environmental performance standards**

3.8.1. Regulatory purpose

- To document the level of performance that control measures must meet in order to manage impacts and risks to ALARP and an acceptable level
- To set the levels of performance against which compliance can be measured on an ongoing basis.

[26] Program report – Streamlining offshore petroleum environmental approvals – Feb 2014

3.8.2. Core concepts

- Environmental performance standards (EPS) are statements of performance required of a control measure (see section 3.6). It is the parameter against which a control measure is assessed to ensure the control measure consistently performs to reduce impact or risk to ALARP and to an acceptable level.
- EPSs facilitate the transition from the theoretical to the practical in the environmental assessment process.
- EPSs will be used as a basis for environmental performance reporting required by regulation 51[27].

3.8.3. Considerations

- Any control measure that is required to reduce an impact or risk to an acceptable level or ALARP will require an environmental performance standard.
- An EPS may relate to multiple control measures or conversely, multiple environmental performance standards may be applied to a single control measure.
- EPSs would describe the desired effectiveness of a control measure in terms of its functionality, availability, reliability, survivability, independence and/or compatibility.
- Environmental performance standards and their associated measurement criteria will generally achieve the purpose of demonstrating environmental performance if they fulfil the intent of the 'S.M.A.R.T' criteria (Specific, measurable, accurate, realistic, timely).
- In cases where the effectiveness of a control measure is dependent on a measurement criterion, such as the use of an instrument or specific scientific technique, it may be appropriate for these to become control measures in their own right and have their own environmental performance standards.

3.9. Measurement criteria

Applicable regulations
subregulation 34(d) – Criteria for acceptance of environment plan **subregulation 21(7) – Environmental performance outcomes and standards and measurement criteria**

3.9.1. Regulatory purpose

- To document the things a titleholder will use to determine whether stated levels of performance are being met.

3.9.2. Core Concepts

- Environmental performance outcomes and environmental performance standards must have appropriate measurement criteria which define how environmental performance will be measured and determine whether the outcomes and standards have been met during the activity.

[27] Note: In some cases breaches of EPSs may constitute a reportable incident – refer to section 3.12 of this guidance

3.9.3. Considerations

- Each environmental performance outcome or environmental performance standard may require more than one measurement criterion to appropriately measure environmental performance.
- Environmental performance outcomes and environmental performance standards may have common measurement criteria though it should be clear how each environmental performance outcome and each environmental performance standard will be measured.
- Appropriate measurement criteria should outline the characteristics, data outputs, accuracy and/or calibration requirements, as required, of the method used to achieve the measurements.
- The EP should define how measurement criteria will be monitored during normal operations and under emergency conditions with sufficient detail to demonstrate that the measurements can be taken, and are appropriate to demonstrate that environmental performance against environmental performance outcomes and standards is being met.
- Where the level of environmental protection afforded by control measures is uncertain, consideration should be given to the inclusion of measurement criteria that validate the effectiveness of controls in protecting the receiving environment.

3.10. Implementation strategy for the environment plan

Applicable regulations
subregulation 34(e) – Criteria for acceptance of environment plan **Regulation 22 – Implementation Strategy for the environment plan**

3.10.1. Regulatory purpose

- To ensure arrangements are in place to:
  - confirm that control measures detailed in the EP are effective in reducing the environmental impacts and risks of the activity to ALARP and acceptable levels, and that EPOs and EPSs are continually met as required by regulations 22(1) through to 22(5) (refer sections 3.10.3.1 & 3.10.3.2)
  - monitor and record planned and unplanned emissions and discharges as required by regulation 22(6) (refer section 3.10.3.2)
  - respond to and monitor impacts of, oil pollution emergencies as required by regulations 22(8), 22(9), 22(10) and 22(11) (refer sections 3.10.3.3 & 3.10.3.5)
  - test the response arrangements in the OPEP as appropriate to the nature and scale of the impacts and risks of the activity as required by regulations 22(12), 22(13) and 22(10) (refer sections 13.10.3.4)
  - provide for effective ongoing stakeholder consultation throughout the implementation of the activity as required by regulation 22(15) (refer to section 3.10.3.6).

3.10.2. Core concepts

- The implementation strategy must comply with the Act, the regulations and any other environmental legislation applicable to the activity [28]
- The implementation strategy should be based on the assessment of impacts and risks and should describe how the control measures identified will be implemented to achieve environmental performance outcomes and performance standards.
- The level of detail within the implementation strategy should be commensurate with the nature and scale of the activity and relevant to the impacts and risks to be managed.
- Four key elements that an implementation strategy should include (see section 3.10.3):
    - an environmental management system (EMS) consistent with AS/NZS ISO 14001.
    - provision of reporting, monitoring, recording, audit, management of non-conformance and review of the titleholder's environmental performance to ensure that environmental performance outcomes and standards in the EP are being met[29]
    - an oil pollution emergency plan (OPEP) and demonstration that appropriate arrangements are in place for the activation of this plan in the event of a spill[30]
    - arrangements for ongoing consultation with relevant authorities, persons and organisations[31] in order to demonstrate that there is an effective two way communication process in place between the titleholder and relevant persons.

3.10.3. Considerations

3.10.3.1. Environmental management system (EMS)

- The EMS is defined in regulation 5. It includes the responsibilities, practices, processes and resources used to manage the environmental components of an activity.
- The AS/NZ Standard ISO 14001:2016 promotes the adoption of a systematic approach to environmental management through implementation of an EMS which centres on environmental leadership commitment and applies four cyclical management elements: plan, do, check and act.
- The 'specific measures' described in the EMS should describe the components of the EMS that will define how the activity will be managed and monitored to ensure that the EPOs and EPSs are met.
- Clear definition of roles and responsibilities is required to ensure effective and consistent implementation of all the environmental management requirements set out in the EP.
- Although many individuals may have assigned tasks under the EP, a specific management representative should have overall responsibility for ensuring that the in-force EP is implemented in an effective and consistent manner.
- The EP should describe how role awareness, training and competency will be maintained for the duration of the activity, for all personnel and contractors with responsibilities under the EP. Particular

[28] (subregulation 22(16))
[29] (subregulation 22(5))
[30] Refer to GN1488 – Oil pollution risk management and
[31] (subregulation 22(15))

emphasis should be placed on describing training and competency for those persons who are responsible for implementing critical control measures. Doing so will help demonstrate that those control measures can be effectively implemented.

- Management review of environmental performance and of the implementation strategy should occur at planned intervals to ensure that the EMS is effective, adequate resources are available for implementing the EP, and to identify and address any necessary changes to the management of environmental impacts and risks for the activity. This is consistent with the 'check-act' components of ISO as presented in Figure 2, and incorporates the application of adaptive management principles.
- The EMS review cycle should evaluate the effectiveness of the EMS as a whole in delivering the environmental performance outcomes and environmental performance standards and addressing any opportunities for improvement to the implementation strategy for the activity or the titleholder's EMS.

3.10.3.2 Monitoring, recording and reporting of environmental performance and implementation strategy

- The implementation strategy requires monitoring to confirm environmental performance and the effectiveness of the implementation strategy[32].
- The implementation strategy must provide for sufficient monitoring of, and maintaining a quantitative record of, emissions and discharges (whether occurring during normal operations or otherwise)[33].
- The frequency and type of the environmental performance monitoring should be appropriate to the nature and scale of the impacts and risks of the activity, with consideration given to the level of confidence in the cause-effect relationship for each source of risk/impact. Where there is less confidence in the effectiveness of a control measures, it would be appropriate to implement more robust monitoring measures.
- The type of monitoring chosen may range from monitoring the procedural controls, to end-of-pipe measurements, through to field-based monitoring of impacts to receptors.
- Where technical equipment is used for monitoring emissions and discharges, titleholders should ensure that the accuracy of that equipment can be demonstrated through appropriate calibration, verification practices and use of relevant technical standards and procedures for measurement.
- The implementation strategy needs to clearly state when the titleholder will report to the Regulator in relation to environmental performance for the activity, noting that this needs to be at least once per year for the duration of the activity[34].
- Provisions for monitoring, recording, audit and management of non-conformance should function to identify 'reportable incidents' as defined in regulation 5, identify recordable incidents (breaches of environmental performance outcomes and environmental performance standards), review overall effectiveness of the implementation strategy and to fulfil the reporting requirements in Part 5 of the Environment Regulations.
- Arrangements should be in place to maintain records in a way that makes retrieval reasonably practicable. Regulations 52 and 53 of the Environment Regulations detail the requirements for storage

[32] Environment Regulations, subregulation 22(5)
[33] Environment Regulations, subregulation 22(6)
[34] Environment Regulations, subregulation 22(7)).

and availability of records. These requirements should be considered in development of the implementation strategy.

- Further guidance on monitoring in the context of environmental performance evaluation is given in AS/NZS ISO 14031:2000 Environmental management – Environmental Performance Evaluation – Guidelines.

3.10.3.3 Oil pollution emergency plans - response arrangements

- Arrangements for the implementation of the OPEP should detail the interface with National, State and industry response plans and third party response service providers. The National Marine Oil Spill Contingency Plan (National Plan) is managed by the Australian Maritime Safety Authority (AMSA)[35]
- The arrangements included in the OPEP should:
  - be comprehensive and commensurate with the level of risk of oil pollution for the activity
  - be adaptable and scalable
  - be realistic, achievable and time bound
  - provide for sufficient resources and personnel to implement and maintain a response for the duration of an incident
  - clearly detail the roles and responsibilities of all relevant individuals and parties in all phases of the response.
- The strength of all arrangements should match the criticality, timeliness and availability of the controls and resources required.
- Mechanisms should be in place to continually assess the ongoing suitability and effectiveness of response arrangements for implementing response strategies relative to pre-determined protection priorities.

3.10.3.4 Oil pollution emergency plans - Testing of response arrangements

- Titleholders should make the case that the testing arrangements are appropriate to the response arrangements and to the nature and scale of the risk of oil pollution for the activity.
- Testing arrangements should:
  - address matters such as the effectiveness, achievability and timeliness of response and the availability and adequacy of resources (personnel and equipment) for the duration of the expected response
  - be realistic, encompass all relevant responders and key personnel in their assigned roles with consideration given to reliance on external providers and key stakeholders
  - be prioritised commensurate with the criticality and complexity of controls
  - include testing of specialised response equipment and systems particularly where these are used infrequently

[35] The National Plan can be accessed from the AMSA website at: **amsa.gov.au**

- describe the scope and form of tests and demonstrate why they are appropriate for the response arrangements and nature and scale of the oil pollution risks
- contain an appropriate range of tests to demonstrate that the titleholder is adequately prepared to respond to emergencies and may include, for example, training, exercises, drills and audits.

- Any relationships or interactions between testing and training arrangements should be described.
- Testing arrangements should include a feedback loop to identify gaps and implement improvements.

3.10.3.5 Oil pollution emergency plans - Operational and scientific monitoring

- Environmental monitoring in the event of a spill serves multiple purposes and should be sufficient to:
  - assess the impacts to the environment from the spill and response activities
  - assess the efficacy of response
  - inform remediation activities that may be required.
- The EP should include a reasoned case for the proposed environmental monitoring, whether limited or extensive. The results from operational monitoring should be used to inform decisions about the need for, as well as the extent and duration of post-spill impact monitoring[36].
- The level of detail required to demonstrate that environmental monitoring arrangements are appropriate may be different depending on risk.
  - for activities that include potential for higher consequence spill scenarios, greater justification may be required to demonstrate that monitoring provisions detailed in the EP are appropriate for assessing the impacts on the environment from the spill
  - for lower consequence spill scenarios, determination of environmental impacts could be undertaken without the need for extensive, long-term in-field monitoring
- Taking into account nature and scale, environmental monitoring described in the EP should be:
  - appropriately scoped, and include methods fit for determining environmental impacts, (as well as documenting recovery)
  - technically and logistically deliverable and defensible
  - sufficiently flexible to account for uncertainty inherent in unplanned events
  - accompanied by clear commitments in relation to readiness and implementation to demonstrate that monitoring will be achievable and effective.
- Section 572C of the OPGGS Act applies in the event of an escape of petroleum to require a titleholder, among other things, to clean up the escaped petroleum, carry out environmental monitoring of the impact of the escape on the environment and remediate any resulting damage to the environment. Therefore monitoring arrangements are to be sufficient to inform any remediation activities. The records produced during environmental monitoring will provide a means to inform decisions about the need for, and scope of, environmental remediation.

[36] For further guidance refer to IP1349 – Operational and scientific monitoring programs – information paper

- If a spill may have potential impacts to matters protected under Part 3 of the EPBC Act, the monitoring priorities and arrangements should include those values and sensitivities such that impacts can be detected and understood to inform any future remediation that may be required[37].

3.10.3.6 Ongoing 'relevant person's consultation

- Regulation 25 identifies the types of authorities, persons and organisations that may be considered to be 'a relevant person' under the Environment Regulations[38].
- Titleholders should consider the need to establish, implement and maintain procedures for managing external communications with relevant persons on an ongoing basis[39].
- The implementation strategy should consider those relevant persons identified in preparation of the EP and any person identified as a relevant person during the public comment process for a seismic or exploratory drilling activity.
- The plan for ongoing consultation provided in the EP should clearly describe arrangements for who, what, when, why and how ongoing consultation will be undertaken for the life of the activity.
- For long-term activities, the implementation strategy should ensure that identification of relevant persons is periodically reviewed to ensure new relevant persons are identified and consulted.
- If, during preparation for the EP, relevant persons request ongoing consultation throughout the activity, these arrangements, including their specific information needs, should be included in the implementation strategy.
- If relevant persons have been identified for interest or involvement in oil pollution emergencies, the implementation strategy should demonstrate that ongoing consultation arrangements are appropriate to ensure emergency preparedness is maintained.

3.11. Consultation report- relevant persons

Applicable regulations
subregulation 34(g) – Criteria for acceptance of environment plan **Regulation 25 – Consultations with relevant authorities, persons and organisations, etc.** **subregulation 24(b) – Other information in the environment plan**

The Regulatory purpose, core concepts and considerations for relevant persons consultation are provided in Guideline – Consultation in the course of preparing an environment plan (N-4750-GL2086).

[37] Further guidance on OPEPs and environmental monitoring in the event of an oil spill, can be accessed via the NOPSEMA webpage http://www.nopsema.gov.au/environmental-management/environmental-resources/
[38] Further information on relevant person consultation is provided in Guideline - Consultation in the course of preparing an environment plan (N-04750-GL2086).
[39] Further information on relevant person consultation is provided in Guideline - Consultation in the course of preparing an environment plan (N-04750-GL2086).

3.12. Reportable and recordable incidents

Applicable regulations
Regulation 5 – Definitions (reportable incident)
subregulation 24(c) – Other information in the environment plan
Regulation 47 – Notifying reportable incidents

3.12.1. Regulatory purpose

- To ensure the EP includes the details of what constitutes a reportable incident in relation to the activity.
- To ensure the EP has provision for recordable incident reporting as a component of its non-conformance reporting framework.

3.12.2. Core concepts

- A 'reportable incident' for an activity, means an incident relating to the activity that has caused, or has the potential to cause, moderate to significant environmental damage.
- A 'recordable incident' is a breach of an EPO or EPS that is not a reportable incident.
- The types of incidents that would be 'reportable incidents' vary depending on the nature of the activity, the location and the particular values and sensitivities of the environment. Consequently, each EP must detail the types of incidents that have potential to cause moderate to significant environmental damage if those incidents were to occur. The EP must identify these as 'reportable incidents' for that activity[40].

3.12.3. Considerations

- The potential to cause moderate to significant environmental damage may be determined from the inherent consequence level of a particular risk, assuming that all control measures that can fail, have failed, and the event has occurred.
- Reportable incidents may arise from unforeseen circumstances. The reporting arrangements in the EP should consider the need to report incidents that have not been specifically identified in the EP.
- As required by regulation 47, reportable incidents are notifiable to NOPSEMA as soon as practicable, but no later than two hours after the incident or after the titleholder becomes aware of the incident. The types of incidents that are defined as 'reportable incidents' should be considered in this context.
- The EP should clearly distinguish between those 'reportable incidents' that are immediately reportable and the 'recordable incidents' which are reported to NOPSEMA on a monthly basis.
- The requirements for reporting recordable incidents to NOPSEMA are specified in regulation 50 of the Environment Regulations.

[40] Refer to NOPSEMA's published guidance on environmental reportable incidents for further information on arrangements for reporting and the required content of incident reports.

3.13. Contact details of titleholder and nominated liaison person

Applicable Regulations

Regulation 23 – Details of titleholder and liaison person

3.13.1. Regulatory purpose

- To confirm the details of the titleholder responsible for the submission and ensure the information held by NOPSEMA remains current.
- To ensure the titleholder has nominated a liaison person for the purposes of communications with stakeholders and members of the public in relation to the EP.
- To provide a point of contact for the public comment period on seismic and exploratory drilling activities.

3.13.2. Core concepts

- The EP must include the name and business details of the titleholder, which may be a body corporate. Note: in the case of multiple titleholders where an eligible voluntary action (EVA) is not in place, the EP must include the details of all titleholders.
- The contact details of the titleholder's nominated liaison person must also be included in an EP.
- The details of the titleholder's nominated liaison person will be published on NOPSEMA's website on submission of an EP (subregulation 26(8)).
- The EP must include arrangements for notifying NOPSEMA of a change in titleholder, a change in the titleholder's nominated liaison person or a change in the contact details for either. These arrangements must include consideration of the timeframe for notifying NOPSEMA of such a change and should be made as soon as practicable and prior to the change occurring.

3.13.3. Considerations

- The details of the titleholder's nominated liaison person is required to ensure that relevant persons or members of the public may contact someone with the authority to communicate on behalf of the titleholder and preferably with detailed knowledge of the EP submission.
- The titleholder's nominated liaison person may receive communications from stakeholders or other interested persons and should have adequate knowledge to manage these communications effectively.
- Notification of a change in nominated liaison person, their details or the contact details for the titleholder should be made as soon as practicable, preferably before the change takes place. What constitutes suitable arrangements may vary according to the nature and scale of the activity, including the duration of the activity and the level of potential stakeholder interaction.

3.14. Corporate environmental policy

Applicable Regulations

subregulation 24(a) – Other information in the environment plan

3.14.1. Regulatory purpose

- To set out the titleholder corporate policies in relation to environmental management and environmental performance.

3.14.2. Core concepts

- The titleholder's corporate environmental policy should be consistent with the levels of environmental performance set in the EP.
- The EP must contain a statement of the titleholder's corporate environmental policy.

3.14.3. Considerations

- The corporate environmental policy should be used to set the context and contribute to the definition of an 'acceptable level' of impact or risk.
- The corporate environmental policy will influence the development of environmental performance outcomes of the activity.
- The corporate environmental policy may also be relevant in setting out the titleholder's approach to consultation and stakeholder engagement.

4. Critical factors for success

As previously noted in section 2.5, the criteria for acceptance of an EP closely relate to the content requirements of an EP. The table below illustrates a simplified view of the associations between the criteria for acceptance and the content requirements. Prior to submitting an EP to NOPSEMA, titleholders should ensure that they have met all the content requirements of an EP and objectively consider whether the content of the EP appropriately achieves the intent of, and demonstrations required by, regulation 34 (Refer to N-04750 – GL1721 – Guideline – Environment plan decision making for additional guidance).

Information in the table below is intended to provide some context to the interactions between content requirements and criteria for acceptance of the Environment Regulations, but should not be applied inflexibly, does not represent all interactions and does not represent NOPSEMA's decision making process.

Criteria for acceptance	Content requirements	Elements
34(a)	21, 22, 24	The principle of 'nature and scale' is applicable throughout the EP.
34(b) **34(c)**	21(1) – 21(6) 24(a) – 24(b)	Set the context (the activity, the environment) Define 'acceptable' (the requirements, the corporate policy, relevant persons) Detail the impacts and risks Evaluate to nature and scale (consider public comments) Detail the control measures - ALARP and acceptable (consider public comments)
34(d)	21(7)	Environmental performance outcomes Environmental performance standards Measurement criteria
34(e)	22	Implementation strategy, including: EMS Performance monitoring, OPEP and scientific monitoring Ongoing consultation
34(f)	21(1), 21(2), 21(3)	No activity or part of the activity….undertaken in any part of a declared World Heritage Property
34(g)	21, 24(b)	Consultation in preparation of the EP
34(h)	23, 24(c)	All content of the EP must comply with the Act and the regulations.

An EP should present a strong case to NOPSEMA to demonstrate why the titleholder believes that the criteria for acceptance have been met. Prior to submitting an EP to NOPSEMA, titleholders should objectively review the EP to ensure the following critical factors have been considered:

- Does the EP clearly include all content requirements of Division 5 of the Environment Regulations?
- Does the EP demonstrate that the criteria in regulation 34 have been met?

- Is the content and level of detail appropriate for each component of the plan with consideration to the nature and scale of the impacts and risks?
- Does the EP demonstrate how the duty holder has had regard to matters protected under Part 3 of the EPBC Act?
- Is the demonstration provided through logically reasoned, well-constructed and supported arguments?
- Does the EP demonstrate transparent decision making in setting the 'acceptable levels' and undertaking the risk evaluation, particularly in relation to the demonstration that impacts and risks are ALARP and have met the acceptable levels?
- Does the EP demonstrate a commitment to quality risk evaluation (and risk treatment) processes and environmental management system frameworks?
- Does the EP appropriately address consultation with each relevant person (as defined in r 25(1) in accordance with Guideline – Consultation in the course of preparing an environment plan (N-4750-GL2086)?
- Does the EP adequately address key matters raised by the public comments during the public comment period for seismic and exploratory drilling EPs?
- Is evidence or appropriate referencing provided, such that NOPSEMA can reasonably determine the accuracy and reliability of information provided?
- Are the statements of performance made throughout the plan (outcomes, standards and measurement criteria) clear and enforceable and not subject to misinterpretation?

5. References and further reading

NOPSEMA guidance

N-04000-PL0050 – Policy - Assessment

N-04750-PL1368 – Policy - Environment assessment policy

N-04000-GL0225 – Guideline – Making submissions to NOPSEMA

N-04750 – GL1721 – Guideline – Environment plan decision making

DRAFT N-04750 – FM1846 –Form - Titleholder report on public comment (template)

DRAFT N-04750 –GN1847 – Responding to public comment on EPs

N-04750-GL1341 – Guideline - Environment plan levies

N-04750-GL2086 – Guideline - Consultation in the course of preparing an environment plan

N-04750-GL1566 – Guideline - Environment plan summaries

N-04750-GN1343 – Guidance Note - Petroleum activities

N-03000-GN0926 – Guideline – Notification and reporting of environmental incidents

N-04750-IP1342 – Information paper – Oil spill contingency planning

N- 04750-IP1349 – Information paper – Operational and scientific monitoring programs

N-04750-FM1848 – Form – EP summary statement

N-04750-FM1257- Environment plan submissions cover sheet

External references

AS/NZS ISO 31000:2018 Risk management – Principles and guidelines

HB 203:2012 Managing environment-related risk

AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use

AS/NZS ISO 14031:2000 Environmental management – Environmental Performance Evaluation – Guidelines.

Australia's National Strategy for Ecologically Sustainable Development. Prepared by the Ecologically Sustainable Development Steering Committee, Endorsed by the Council of Australian Governments, December 1992.

National Marine Oil Spill Contingency Plan (AMSA)

Australian Government Guidance, Australian Government agencies' roles and relevance under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*

Appendix A: Environment plan assessment process

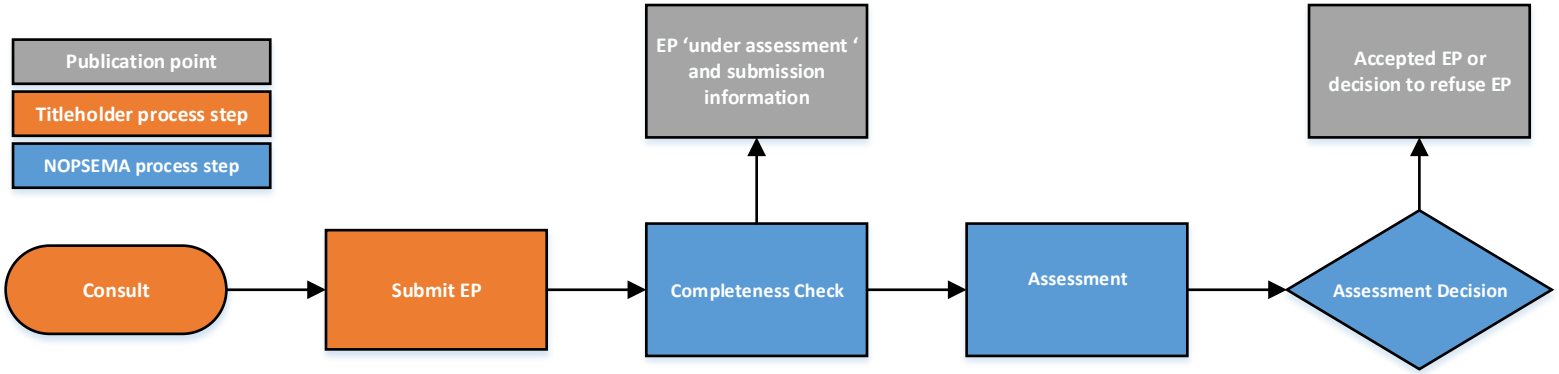

Figure 1 – Assessment process for development EPs

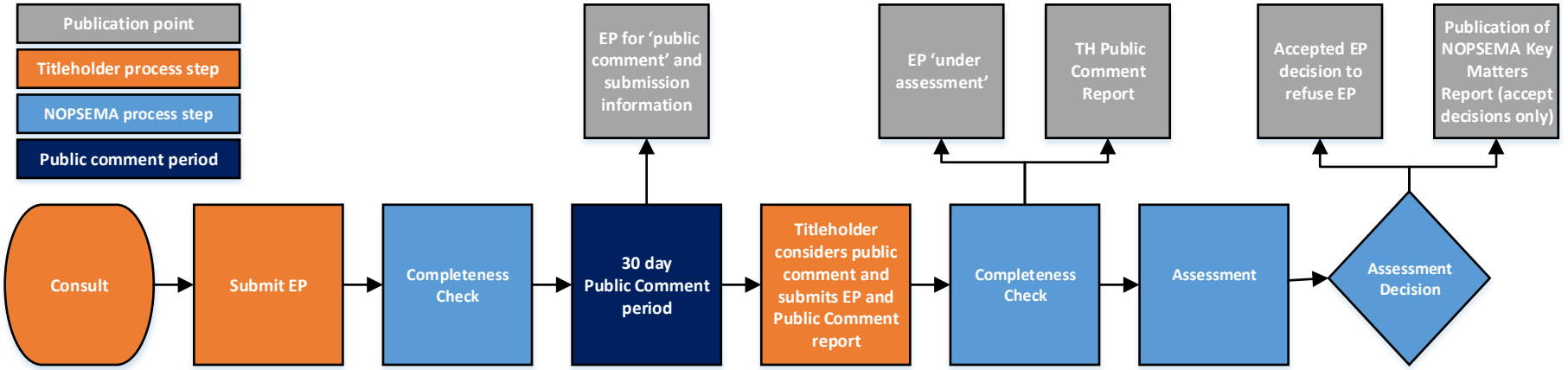

Figure 2 – Assessment process for seismic and exploratory drilling EPs

Appendix B: Titleholder considerations and documentation relevant to matters protected under Part 3 of the EPBC Act

This attachment provides a summary of considerations and information relevant to matters protected under Part 3 of the EPBC Act. This is intended as a guide only and titleholders should, as a matter of course, review all available information for relevance and currency.

Table 1: Information to consider during the preparation of an EP that includes activities that may impact matters protected under the EPBC Act.

Matter protected	Titleholder considerations	Information to consider during the development of an EP
World Heritage properties	An EP that involves the activity or part of the activity, other than arrangements for environmental monitoring or for responding to an emergency, being conducted in any part of a declared World Heritage property within the meaning of the EPBC Act will not meet the acceptance criteria. Titleholders should demonstrate that the activity does not contravene a plan of management for a World Heritage property or propose unacceptable impacts to the world heritage values of a World Heritage property. If there is no plan of management for a World Heritage property, titleholders should take all reasonable steps to ensure that an EP that refers to the property is not inconsistent with the Australian World Heritage management principles.	Relevant policy documents, guidelines and statements of universal value on the DoE website. Relevant plan of management for the World heritage property or the Australian World Heritage management principles where a plan of management does not exist.
National heritage values of declared National Heritage places	Titleholders should demonstrate that the activity does not contravene a plan of management for a National Heritage place or proposes unacceptable impacts to the National heritage values of a National Heritage place. If there is no plan of management for a National Heritage place, then titleholders should take all reasonable steps to ensure that an EP that refers to the place is not inconsistent with the National Heritage management principles.	Relevant policy documents, guidelines, gazettal instruments and plans of management on the DoE website.

Matter protected	Titleholder considerations	Information to consider during the development of an EP
Wetlands of international importance	Titleholders should demonstrate that the activity does not contravene a plan of management for a Ramsar wetland or propose unacceptable impacts to the ecological character of a Ramsar wetland. If there is no plan of management for a Ramsar wetland, then titleholders should take all reasonable steps to ensure that an EP that refers to the wetland is not inconsistent with the Australian Ramsar management principles.	Relevant policy documents, guidelines, Ramsar Information Sheets, Ecological Character Descriptions and plans of management on the DoE website
Listed threatened species and ecological communities	Titleholders should demonstrate that the activity would not result in unacceptable impacts to a listed threatened species or ecological community. The titleholder should demonstrate that the EP is not inconsistent with a recovery plan or threat abatement plan for a listed threatened species or ecological community.	Relevant policy documents, recovery plans, threat abatement plans, conservation advice and guidelines on the DoE website.
Listed migratory species	Titleholders should demonstrate that the activity does not result in unacceptable impacts to a migratory species or an area of important habitat for a migratory species.	Relevant policy documents, wildlife conservation plans and guidelines on the DoE website.
Commonwealth marine environment	Titleholders should demonstrate that the activity would not result in unacceptable impacts to the environment of a Commonwealth marine area. Titleholders should have regard to any relevant bioregional plan and demonstrate that the EP is not inconsistent with a plan of management for a Commonwealth marine reserve or a Commonwealth Heritage place. If there is no plan of management for a Commonwealth marine reserve, then titleholders should demonstrate that the EP is not inconsistent with the International Union for Conservation of Nature (IUCN) reserve management principles. If there is no plan of management for a Commonwealth Heritage place, then titleholders should take all reasonable steps to ensure that the EP is not inconsistent with the Commonwealth Heritage management principles.	Relevant policy documents, gazettal instruments, bioregional plans (including the conservation atlas), wildlife conservation plans, plans of management and EPBC Act guidance documents on the DoE website.

The following list provides links to information and documents relating to matters protected that should be considered during the development of a submission to NOPSEMA. Please note that while every effort has

been made to ensure the validity of the links below, NOPSEMA is not able to guarantee that they will remain valid in every case.

Table 2: References for matters protected under Part 3 of the EPBC Act.

General information	
1	EPBC Act and EPBC Regulations
	comlaw.gov.au
2	EPBC Act Policies and Guidelines including Significant Impact Guidelines 1.1 and 1.2
	environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999/policy
3	EPBC Act lists of heritage places, species and ecological communities and Australian RAMSAR wetlands
	environment.gov.au/legislation/environment-protection-and-biodiversity-conservation-act/about-epbc-act/epbc-act-lists
4	Protected matters search tool
	environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999/protected
5	Conservation values atlas
	environment.gov.au/topics/marine/marine-bioregional-plans/conservation-values-atlas
World heritage properties	
6	World Heritage property list and links to relevant information on each property
	environment.gov.au/topics/heritage/heritage-places/world-heritage-list
7	Australian World Heritage Management principles (Schedule 5 of the EPBC Regulations)
	comlaw.gov.au/Details/F2014C01116
National heritage places	
8	National heritage places list and links to relevant information on each place
	environment.gov.au/heritage/places/national-heritage-list
9	National heritage management principles (Schedule 5B of the EPBC Regulations)
	comlaw.gov.au/Details/F2014C01116
Ramsar wetlands	
10	List of wetlands of international importance (Australia's Ramsar wetlands)
	environment.gov.au/cgi-bin/wetlands/
11	Ramsar information sheets, ecological character descriptions and management plans
	environment.gov.au/topics/water/water-our-environment/wetlands/ramsar-convention-wetlands/ramsar-documents
12	Australian Ramsar Management principles (Schedule 6 of the EPBC Regulations)
	comlaw.gov.au/Series/F2000B00190
Threatened species and ecological communities and migratory species	
13	Threatened flora and fauna species
	environment.gov.au/topics/biodiversity/threatened-species-ecological-communities/threatened-species

14	Threatened ecological communities
	environment.gov.au/biodiversity/threatened/communities
15	Specific profile and threats database (SPRAT)
	environment.gov.au/cgi-bin/sprat/
16	Biologically important areas of regionally significant marine species
	environment.gov.au/marine/marine-species/bias
17	National marine mammal database
	data.marinemammals.gov.au/
18	Recovery plans adopted under the EPBC Act
	environment.gov.au/cgi-bin/sprat/public
19	Threat abatement plans
	environment.gov.au/topics/biodiversity/threatened-species-ecological-communities/threat-abatement-plans/approved-threat
20	Conservation advices
	environment.gov.au/cgi-bin/sprat/public/conservationadvice.pl
21	Wildlife conservation plans
	environment.gov.au/resource/wildlife-conservation-plan-migratory-shorebirds
Commonwealth marine area	
22	Commonwealth Marine Reserves (including links to conservation values and relevant management plans)
	environment.gov.au/topics/marine/marine-reserves
23	Australian IUCN Reserve Management principles (Schedule 8 of the EPBC Regulations)
	comlaw.gov.au/Details/F2014C01116
24	Bioregional marine plans
	environment.gov.au/topics/marine/marine-bioregional-plans
25	Commonwealth Heritage places
	environment.gov.au/topics/heritage/heritage-places/commonwealth-heritage-list
26	Commonwealth Heritage management principles
	comlaw.gov.au/Details/F2014C01116