



Department of
Industry and Resources



Petroleum Guidelines

Environmental Assessment
Processes for Petroleum Activities
in Western Australia

Revision 5.0 July 2006

Environment Division

ENVIRONMENTAL ASSESSMENT PROCESSES FOR PETROLEUM ACTIVITIES IN WESTERN AUSTRALIA

Please note:

Applications in State jurisdiction require submission of two hard copies of Environmental Management Plans.

Applications in Commonwealth jurisdiction require submission of two hard copies for Environment Plans and two hard copies of Oil Spill Contingency Plans.

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1. INTRODUCTION

Environmental planning and management is an essential component when carrying out petroleum activities in Western Australia. The purpose of this document is to provide information on the environmental assessment and approval processes for petroleum activities regulated under both the State and Commonwealth Petroleum Acts, and provide guidance on the documentation required as part of that process.

This document is intended to reflect the Western Australian Government's policy for the management of the marine and terrestrial environment (e.g. the State Government's New Horizons Policy— the Way Ahead in Marine Conservation Management; Government of Western Australia, 1997a) and complements statutory requirements for the regulation of petroleum activities in WA.

In particular, this document aims to provide industry, decision-making authorities, interest groups and the general public with:

- background information on the role of the Department of Industry and Resources (DoIR) in regulating petroleum activities in Western Australia;
- information on the environmental assessment and approvals process for petroleum proposals, including legislative requirements and documentation required;
- information on key government and public agencies involved in environmental assessment, and how they interact;
- information on the documents required by regulators in applying for and undertaking petroleum activities; and
- contacts for more information.

The anticipated benefits and outcomes of this document are:

- improved knowledge by proponents of the assessment process and how regulatory authorities interact;
- increased awareness by proponents of the documentation required when seeking improved communication among government, industry and community stakeholders on environmental matters in respect of the development of petroleum resources; and
- improved management of petroleum activities with the aim to reduce environmental risk.

In providing guidance to proponents DoIR is moving away from a prescriptive regulatory approach towards a co-regulatory, risk-based approach to the regulation of petroleum activities. The risk-based assessment of petroleum proposals allows for continued consistency in the application of assessment procedures to proposals on a case-by-case basis. This approach is consistent with the underlying philosophy of the Commonwealth Petroleum (Submerged Lands)(Management of Environment) Regulations 1999. This move towards an objective risk-based approach is intended to be applied to areas of State jurisdiction and similar regulations for the Petroleum (Submerged Lands) Act 1982, Petroleum Act 1967 and Petroleum Pipelines Act 1969 are in preparation.

This document supersedes the earlier *Guidelines for Petroleum Proponents (DoIR, 1993)* and was revised to reflect changes in both legislation and philosophy of regulation. Biennial updates are expected to be carried out and an information series providing guidelines on specific issues of relevance to petroleum proponents complements this document.

The information series includes:

- guidelines on minimising acoustic disturbance to marine fauna;
- guidelines for seismic surveys in Western Australian rock lobster fishing grounds; and
- Guidelines for the use and management of drilling fluids and cuttings.

The information series will be expanded to cover new issues as they emerge.

Other guidelines are also being developed and updated to incorporate advances in scientific knowledge and ecological understanding.

When finalised, the guidance document and complementary information series will be available from DoIR's website (www.doir.wa.gov.au).

More information can be obtained from DoIR's General Manager Petroleum, Environment Division (see section 5 for contact details).

The development and assessment of environmental documentation in the petroleum sector involves a range of documents and assessment processes, and input from different agencies and organisations. The acronyms by which they are referred to throughout this document are listed in Appendix 1.

1.1 Role of the Department of Industry and Resources

The role of DoIR is to facilitate the development of Western Australia's petroleum resources in a manner that is environmentally responsible, ecologically sustainable and consistent with industry's 'good oil-field practice' (as defined in the *Petroleum Act 1967* and *Petroleum (Submerged Lands) Acts 1967 and 1982*) as applied to local circumstances.

DoIR's Petroleum and Royalties and Environment Division's are responsible for the assessment of petroleum proposals in Western Australia. DoIR has jurisdiction over petroleum activities carried out on State land, in State waters, and over activities in Commonwealth land and waters; either through joint authority or designated authority arrangements. The Petroleum and Royalties Division is the first point of contact for proponents seeking to carry out petroleum activities in Western Australia.

The required safety assessments are undertaken by the Department of Consumer and Employment Protection (DoCEP) for onshore projects, and by the National Offshore Petroleum Safety Authority (NOPSA) in offshore areas. The environmental component of all project approvals is conducted by DoIR's Environment Division.

DoIR achieves its objectives with respect to the assessment of petroleum proposals and the environment by:

- providing advice to proponents on legislative requirements (and legislative development);
- assessing the acceptability of proponent's applications and associated environmental documentation;
- setting environmental conditions for petroleum activities;
- administering the petroleum legislation; and
- conducting audits and reviews of proponents' commitments, environmental documentation and environmental performance.

For proposals to be accepted and for an activity to proceed, proponents must demonstrate that they have identified all relevant environmental aspects of their activity, interactions with the existing environment, and that they have provided management commitments to DoIR's satisfaction and to other government agencies where relevant.

DoIR's assessment of offshore petroleum proposals is consistent with the State Government's *New Horizons Policy — the way ahead in marine conservation management (Government of WA, 1997a)*. The policy defines multiple use zones within marine conservation reserves, and outlines activities allowable in the three tiers of marine conservation reserves. Petroleum drilling and production may be permitted in marine management areas, and general and special use zones of marine parks where it will be compatible with other uses of the zone. This approach is also consistent with the *Commonwealth Government's Australia's Oceans Policy (Commonwealth of Australia, 1998a, b)*.

1.2 Petroleum Legislation and Jurisdiction

Petroleum legislation is enacted to provide legislative and regulatory requirements for the exploration and extraction of petroleum resources in a safe and environmentally responsible manner. An approved petroleum operation must comply with all relevant legislation. In Western Australia, the applicable environmental legislation may be State or Commonwealth, depending on the operation's location.

The relevant Western Australian Acts are:

- *Petroleum Act 1967*;
- *Petroleum Act 1967 Schedule of Onshore Petroleum Exploration and Production Requirements 1991*;
- *Petroleum Pipelines Act 1969*;
- *Petroleum (Submerged Lands) Act 1982*; also known as P(SL)A 1982;
- *P (SL) Acts Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995 (regulates both State and Commonwealth activities)*.

The relevant Commonwealth Acts are:

- *Petroleum (Submerged Lands) Act 1967*; also known as P(SL)A 1967;
- *P (SL) Acts Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995 (regulates both State and Commonwealth activities)*; and
- *Petroleum (Submerged Lands) (Management of Environment) Regulations (1999)*.

Proposals may also be subject to assessment under the *Environment Protection Act 1986* (EP Act) for those proposals under State jurisdiction, or under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for proposals that may impact on a matter(s) of National Environmental Significance (NES) (this may apply to areas of both State and Commonwealth jurisdiction). Relevant legislation and jurisdiction boundaries for onshore and offshore activities are described below in Sections 1.2.1 and 1.2.2 respectively.

1.2.1 Onshore Activities

The State Government has jurisdiction for onshore petroleum activities, which are regulated through the *Petroleum Act 1967*, the *Petroleum Act 1967 Schedule of Onshore Petroleum Exploration and Production Requirements 1991* and the *Petroleum Pipelines Act 1969*. These Acts and Schedules are administered by DoIR. Onshore proposals may be subject to assessment under the *EP Act 1986*, administered by the Department of Environment and Conservation (DEC). Onshore proposals may also be subject to assessment under the Commonwealth EPBC Act if a matter(s) of NES are triggered.

1.2.2 Offshore Activities

State and Commonwealth jurisdiction over offshore activities is defined by their distance from land, or more precisely, by their distance from the territorial sea baseline, located mainly at the low-water line along the coast. The territorial sea comprises the area 12-nm seaward of the baseline. The first 3-nm seaward of the baseline is coastal waters that come under State jurisdiction. The Offshore Constitutional Settlement (OCS) between the Commonwealth and the State, in conjunction with the *Coastal Waters (State Powers) Act 1980* and the *Coastal Waters (State Title) Act 1980* have resulted in Western Australia effectively gaining full legislative powers in the 3-nm zone. Under the *P (SL) A 1982*, State jurisdiction may extend beyond 3-nm to the outer extent of the territorial Sea, e.g. in the North West Shelf region (Figure 1). Commonwealth jurisdiction extends seaward from 3-nm to 200-nm (or the edge of the physical continental shelf to 350-nm). More information on Australian maritime boundaries may be obtained at:

<http://www.ga.gov.au/nmd/mapping/marbound/>

The OCS has also resulted in the formation of a joint authority between the Commonwealth Minister for Resources and Energy and the State Minister for Resources. The respective departments, Department of Industry Tourism and Resources (DITR) and DoIR, administer offshore exploration and production activities. The formation of the joint authority between the State and Commonwealth facilitates the assessment of petroleum proposals in a similar manner to administrative arrangements between State departments.

The State and Commonwealth have produced the *P (SL) Acts Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995*, to ensure that offshore activities are effectively regulated in a similar manner, irrespective of whether they are located in State or Commonwealth waters. Similarly it is intended that a co regulatory risk-based approach akin to the Commonwealth *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999* will be applied to all applicable State Acts. Other State and Commonwealth legislation and international agreements, designed to protect the environment, complement the petroleum acts. For example, petroleum activities under State jurisdiction may be assessed under the *EP Act 1986* or the *EPBC Act 1999*, and under Commonwealth jurisdiction, may be assessed under the *EPBC Act 1999*.

Other State and Commonwealth legislation and international agreements to which petroleum activities must comply are detailed in Section 2.1.

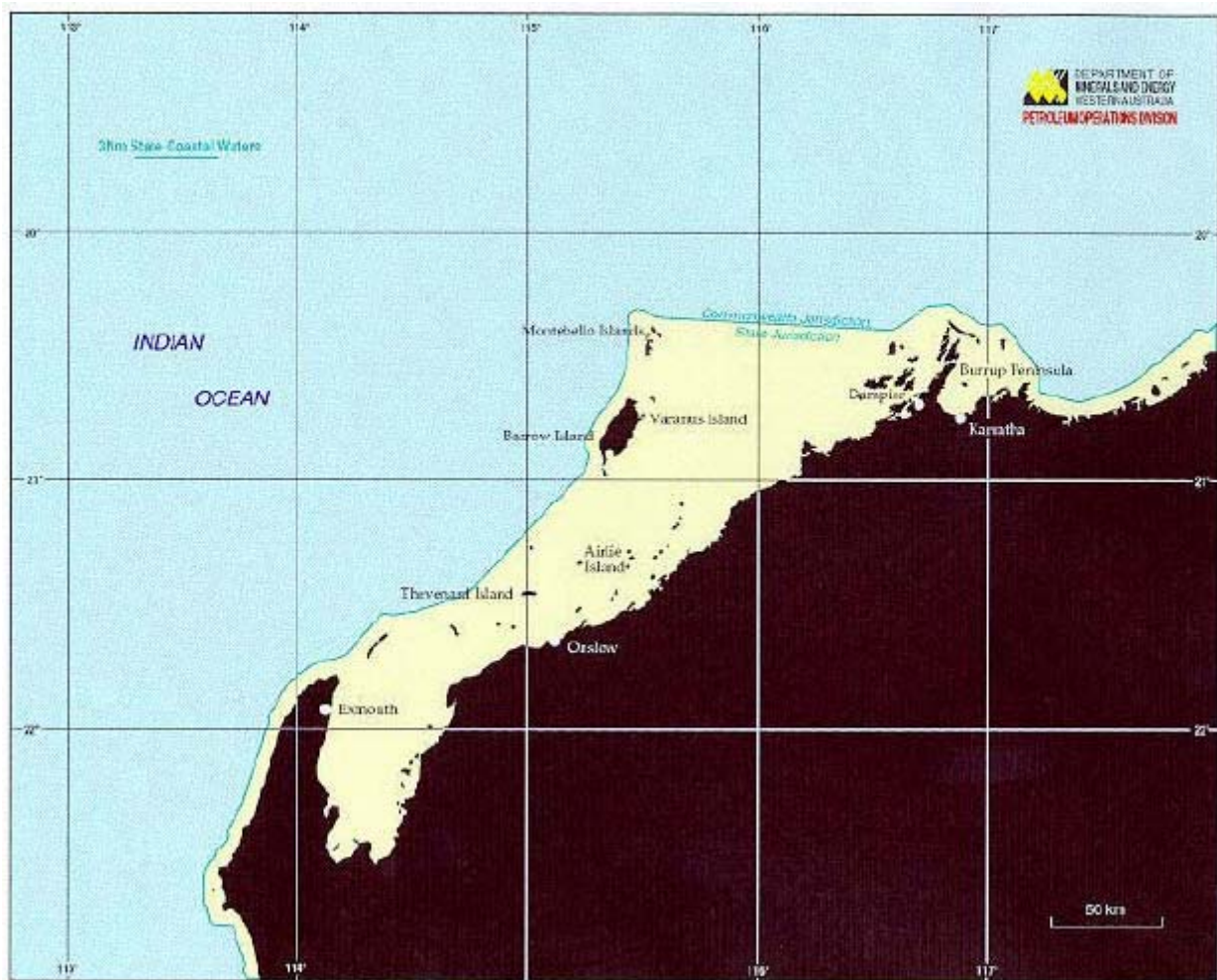
1.3 ENVIRONMENTAL LEGISLATION

1.3.1 Petroleum (Submerged Lands) (Management of Environment) Regulations 1999 (Commonwealth)

The *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999* (MoE Regulations) are applicable to activities in Commonwealth waters and took effect on 1 October 1999.

The objective of the Management of Environment (MoE) regulations is to ensure that petroleum activities are carried out in an ecologically sustainable manner, and in accordance with an Environment Plan that has appropriate risk-based environmental performance objectives and standards, and provides criteria for determining whether the objectives and standards are met. Although the regulations refer to offshore activities in Commonwealth waters, it is anticipated that mirror legislation will be introduced for offshore activities in State waters in the near future.

Figure 1: Jurisdiction boundaries for petroleum activities on the North West Shelf



Under these regulations, proponents must submit an Environment Plan (EP) when applying to carry out offshore petroleum activities in Commonwealth waters. The provision of comprehensive information about a proposal in an EP, of an appropriate scope and level of detail, will facilitate the environmental assessment and approval process for petroleum activities.

According to Division 2.3 of the regulations, an EP must include a(n):

- description of the activity;
- description of the environment;
- description of environmental impacts and risks;
- environmental performance objectives and standards;
- environmental requirements; and
- implementation strategy containing:
 1. measures to ensure environmental performance objectives and standards are met;
 2. measures to establish a chain of command;
 3. provision for training;
 4. monitoring, audit and review of environmental performance;
 5. provision for keeping of records of discharges and emissions; and
 6. provision of an emergency response manual (including an oil spill contingency plan);
 7. consultation arrangements; and
 8. reporting arrangements.

The introduction of the 'activity' concept is designed to incorporate multiple operations of the same type (i.e. seismic activity). Grouping of multiple activities under a single Environment Plan (EP) may be acceptable under circumstances where:

- the activities are carried out by the same proponent;
- the activities are located within the same geographical area with similar environmental values and significance; and
- the activities are of the same nature (such as a permit-wide drilling program).

The individual and cumulative environmental effects arising from grouped activities should be addressed in the EP. The *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999* is available at:

<http://www.comlaw.gov.au/ComLaw/Legislation/LegislativeInstrumentCompilation1.nsf/frameLodgmentAttachments/ECE0E2B32D314F9CCA256F71004F90FE?OpenDocument>

Guidelines to assist proponents on the preparation and submission of an EP have been prepared by the Commonwealth Department of Industry Tourism and Resources (DITR) and are available at:

<http://www.industry.gov.au/content/itrinternet/cmscontent.cfm?objectid=D9862893-65BF-4956-B0D488C0503359BC&searchID=27494>

Changes to the *MOE Regulations* and the *P (SL) Act Schedule Specific Requirements as to Offshore Petroleum Exploration and Production*.

On 20 December 2005 a number of amendments were made to the *Petroleum (Submerged Lands) (Management of Environment) Amendment Regulations 2005*. Included is a change to *Regulation 11* which now states that within 10 days of receiving a notification that the designated authority has accepted an EP, the operator must submit a summary of the plan to the DA for public disclosure. This summary is then posted on the DoIR website along with all current petroleum proposals approved in State and Commonwealth waters off Western Australia.

Proponents should be aware that there are now transitional arrangements in place under the *P (SL) (Management of Environment) Regulations 1999* and the *P (SL) Act Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995*. The *P (SL) Act Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995* has also recently been amended. Clauses relating to environmental aspects have been deleted from the schedule. These changes apply to operations under Commonwealth jurisdiction only. The full schedule still applies to activities in Western Australian State waters.

1.3.2 Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) or EPBC Act 1999

The *EPBC Act 1999* replaces five previous Commonwealth environment acts. The acts replaced are:

- *Environment Protection (Impact of Proposals) Act, 1974 (EP(IP) Act)*;
- *Endangered Species Protection Act 1992*;
- *National Parks and Wildlife Conservation Act 1975*; • *Whale Protection Act 1980*; and
- *World Heritage Properties Conservation Act 1983*.

Under this legislation, The Department of the Environment and Heritage (DEH) is able to call in for assessment those proposals considered to have the potential for significant impacts on the environment in both State and Commonwealth jurisdiction. Proponents are also required to refer their proposals directly to DEH if the proposal has, will have or is likely to have a significant impact on a matter of National Environmental Significance (NES). Matters of NES that may trigger assessment of a proposal under the *EPBC Act 1999* may be in relation to:

- World Heritage Properties;
- Wetlands of international importance (RAMSAR wetlands);
- Nationally threatened species and ecological communities;
- Listed migratory species;
- Commonwealth marine areas; and
- Nuclear actions.

The following assessment and approval options are provided for in the *EPBC Act*. Assessment on a case-by-case basis may also require completion of one of the following assessment documents:

- Preliminary Documentation;
- Public Environment Review;
- Environmental Impact Statement;
- Inquiry;
- An accredited assessment process under a Bilateral Agreement or Ministerial Declaration by the Commonwealth Minister for the Environment and Heritage (Commonwealth Minister for the Environment); and
- An accredited approval process under a Bilateral Agreement or Ministerial Declaration by the Commonwealth Minister for the Environment.

The EPBC Act has requirements additional to referring matter(s) of National Environmental Significance (NES), specifically in relation to requirements for permits. The requirement for a permit under the EPBC Act is independent of whether a proposal has been referred, assessed and, or approved under the Act. The permit system allows proponents to

undertake an activity that may impact upon matter(s) of NES. For example, a proposal that is likely to interfere with a cetacean (this may include a seismic activity that occurs within known cetacean migratory routes) may require a permit.

The EPBC Act is available at:

[http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/FEDA242EDE9999FACA256FE400043A8C/\\$file/EnvProtBioDivCons99Vol1WD02.pdf](http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/FEDA242EDE9999FACA256FE400043A8C/$file/EnvProtBioDivCons99Vol1WD02.pdf) and an overview of the Act is available at: <http://www.environment.gov.au/epbc>

1.3.3 Environmental Protection (Clearing of Native Vegetation) Regulations 2004.

The *Environmental Protection Act 1986* provides for the protection of native vegetation and control of clearing. This came into force on 8 July 2004. Any clearing of native vegetation will require a permit under Part V of the Act except where exemptions are granted under Schedule 6 of the Act or prescribed by regulation in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. This repeals the notice of intention to clear land provision (clearing controls) in the *Soil and Land Conservation Act 1945*.

For the mineral and petroleum industries, applications for any clearing associated with their exploration, development or production activities will require a permit except where granted an exemption.

For more information contact DoIR's Native Vegetation Protection Assessment Branch on **(08) 9222 3614** or the Department of Environment and Conservation's Native Vegetation Protection Section (free call **1800 061 025**).

Alternatively go to the department's website at:

<http://www.doir.wa.gov.au/environment/BA0EB051C4CE48EA8B2D147621991014.asp>

1.4 Frequently Asked Questions

The following section addresses the most frequently asked questions in relation to environmental assessment and approval for petroleum proposals.

What is a petroleum activity?

A petroleum activity is defined in this document as an activity carried out with authority granted under the petroleum acts or regulations. In particular, a petroleum activity is any of the following activities:

- seismic or other surveys;
- drilling;
- construction and installation of a facility;
- operation of a facility;
- significant modification of a facility;
- decommissioning, dismantling and removing a facility;
- construction and installation of a pipeline;
- operation of a pipeline;
- significant modification of a pipeline;
- decommissioning, dismantling and removing a pipeline;
- storage, processing and transmission of petroleum;
- any other activities or works for which a petroleum instrument, other authority or consent is required under the petroleum acts or regulations. (This definition covers current and proposed activities, and any stage of an activity, and is consistent with the *P (SL) (Management of Environment) Regulations 1999*.)

What do I have to do to gain environmental approval to carry out petroleum activities?

To obtain approval to carry out petroleum activities, a proponent must first submit an application form (available from DoIR) accompanied by supporting environmental documentation. For exploration and production proposals in State jurisdiction, the requirements for environmental documentation consist of an Environmental Management Plan (EMP) and an Oil Spill Contingency Plan (OSCP).

Under the *P (SL) (Management of Environment) Regulations 1999*, an Environment Plan is required instead of an EMP for proposals under Commonwealth jurisdiction (refer to Section 1.3.1)

The objective of submitting environmental documentation is to ensure that petroleum activities are carried out in an ecologically sustainable manner, in accordance with appropriate risk-based environmental performance objectives and standards, as measured against appropriate performance criteria.

A proponent may also require additional environmental approval under other (separate) processes.

Specifically a proponent may be required to refer a proposal to DEH under the EPBC Act even though an application to undertake the activity (including an accepted EMP or EP) has been approved by DoIR. Other approvals may include requirements for permits.

A works approval or license may be required from the DEC for petroleum proposals that are a prescribed premise (see Section 4.3). Under the EPBC Act a permit may be required for activities that may impact a matter of NES. For example, a proposal that is likely to interfere with a cetacean (this may include seismic activity that occurs in known cetacean migratory routes) may require a permit. The requirement for a permit under the EPBC Act is independent of whether a proposal has been referred, assessed and, or approved under the Act (see Section 4.3).

I've submitted an application to DoIR with an Environment Plan (EP) or an Environmental Management Plan. Does that mean I don't have to refer the proposal under the EPBC Act?

The submission of an EMP or EP with an application is a requirement of petroleum legislation and regulation. The requirement to refer a proposal under the EPBC Act is a process independent of those administered by DoIR. It is the responsibility of the proponent to refer a proposal to DEH under the EPBC Act if they consider a proposal has, will have or is likely to have a significant impact on a matter(s) of NES.

There are also substantial penalties associated with not fulfilling the requirements of the EPBC Act, including fines and prison terms. Therefore, if a proponent is uncertain whether their proposal triggers the EPBC Act, it may be beneficial to adopt a precautionary approach and refer the proposal, or seek advice from officers within the Department of Environment and Heritage.

What has changed between the Environment Plan (IP) Act and the EPBC Act?

Under the EPBC Act, the responsibility for referral lies with the proponent, whereas previously under the EP (IP) Act the joint authority was responsible for the designation of a proposal for assessment by DEH. The Commonwealth Minister for the Environment can now also set conditions of approval directly on a proposal.

The EPBC Act also sets statutory timeframes for determining whether a referred proposal is an action requiring further assessment, setting the level of assessment, preparing an assessment to report to the Commonwealth Environment Minister, and determining approval conditions.

Additionally, the information required by DEH to determine whether a referred proposal triggers the EPBC Act differs from information previously submitted under the EP (IP) Act. DEH have provided guidelines on the content of a referral form is available on the DEH website at <http://www.deh.gov.au/epbc/assessmentsapprovals/referrals/guide.html>.

If a proposal is determined to trigger the EPBC Act, the assessment will only relate to matters of NES (other environmental issues will be dealt with under existing petroleum legislation or regulation).

The EPBC Act is cross-jurisdictional and any impact on a matter(s) of NES will trigger a referral regardless of whether the proposal is in a State or Commonwealth area.

Who should I contact and when?

For general inquiries, the General Manager for Petroleum within the Environment Division of DoIR is the appropriate first point of contact. The general manager can provide advice on areas within the jurisdiction of DoIR, on issues which are likely to be relevant to the proposal, and advice on other relevant agencies to contact.

As it is the responsibility of the proponent to identify all of the environmental issues associated with their proposal, DoIR encourages proponents to seek advice from relevant government agencies with jurisdiction over specific issues that relate to the proposed operation.

For example, if information is needed about the proximity of the site to nature reserves and other high nature conservation values (see Section 4.3); DEC will be the best point of contact.

Consultation with other agencies should occur prior to the submission of an application to DoIR or the submission should include a detailed proposal for upcoming consultation. A contact list of government agencies is provided in Section 5 of this document.

What do I need to provide with my application?

The proponent is responsible for providing information about the proposed activity, its location and the receiving environment, and the potential environmental effects and risks of the proposal. This information should be presented as an Environmental Management Plan (EMP) for proposals under State jurisdiction, or an Environment Plan (EP) for proposals under Commonwealth jurisdiction. The scope and detail of an EMP or EP will vary depending on the location of

the proposal and the environmental sensitivities of the area. However, the EMP or EP should be sufficiently detailed to assist DoIR to determine that environmental impacts have been reduced to as low as reasonably practicable and to determine whether the proposal should be formally referred to the EPA (State). The information provided will also assist the EPA or DEH in determining the appropriate level of assessment of the referred proposal.

Development of a detailed EMP or EP will also assist DoIR in providing the proponent with feedback on relevant regulatory and legislative compliance requirements, and in identifying areas where environmental performance may be improved.

DoIR encourages proponents to consult widely with other regulatory agencies during the development of their EMP or EP to determine any site-specific management requirements.

What is the difference between an Environmental Management System, an Environmental Management Plan and an Environment Plan?

An Environmental Management System (EMS) is typically an organisation-wide document that provides a perspective on all of an organisation's activities, from broad level policies to specific operational tasks, outlined in environmental management procedures (see also *Standards Australia 1996a*).

An EMP is an activity-specific environmental management document that is presently required for all proposals under State jurisdiction. The content of an Environmental Management Plan (EMP) is shown in Table 2 and in Section 2.2 (an EMP need only contain those aspects of Table 2 that are appropriate to the activity). It is anticipated that for offshore proposals in State waters, the requirement for an EMP will be replaced by the requirement for an Environment Plan (EP) when legislation is introduced to mirror the new Commonwealth regulations.

An EP is a requirement for offshore proposals under Commonwealth jurisdiction under the *P (SL) (Management of Environment) Regulations 1999*. The content of an EP is shown in Table 2 and in Section 2.2 (an EP must contain all aspects of Table 2). The EP is an activity-specific document that provides details on the specifics of the proposal, such as the area, receiving environment and operational details, in addition to information on the organisation's corporate policy and environmental objectives.

The EP includes an implementation strategy that provides the operational systems, practices and procedures to ensure that the environmental effects and risks are reduced as low as reasonably practicable, and the environmental performance objectives and standards are met.

How do I go about developing an Environmental Management Plan (EMP), Environment Plan (EP) or Oil Spill Contingency Plan (OSCP)?

Guidelines for the development of an EMP or EP and an OSCP are provided in Sections 2.2 and 2.3 respectively. Guidance for the development of an EP is also provided in the *P (SL) (Management of Environment) Regulations 1999*. Development of an EMP, EP or OSCP can be undertaken by proponents, or by specialist consultants acting on the behalf of proponents.

Who is involved in the assessment and approval of petroleum activities?

The Department of Industry and Resources (DoIR) Environment Division is responsible for the assessment of environmental documentation and for determining whether formal referral of a proposal is required. Proposals under State jurisdiction may be referred to the EPA (as per the administrative arrangements between DoIR, EPA and DEC; see Section 3.1.5). DoIR also provides advice to proponents regarding petroleum activities and sets final conditions for the approval of petroleum activities.

Environmental Protection Authority (EPA)

The **Environmental Protection Authority (EPA)** is an independent body supported by the DEC who assess and set levels of assessment upon formally referred proposals, as per the provisions of Part IV of the *EP Act 1986*.

The EPA also provides independent advice to the Minister for the Environment.

Department of Environment and Conservation, Environmental Services Branch (previously Department of Environment)

DEC's Environmental Services Branch administers the arrangements with DoIR on behalf of the EPA, and administers the *EP Act 1986*. DEC provides advice to DoIR and proponents in relation to proposals, and assesses proposals against the requirements of the *EP Act 1986*.

DEC also coordinates informal and formal assessment of referred proposals. Any site regarded as 'prescribed premises' under the *EP Act 1986* will be required to have a license to operate, under Part V of the Act, in addition to the relevant approvals under the various Petroleum Acts.

Department of Environment and Conservation, Parks and Conservation Services Branch (Previously Department of Conservation and Land Management)

DEC's Parks and Conservation Services Branch is involved in the approval process where petroleum activities potentially impact upon protected flora or fauna, or the proposal is located within an existing conservation reserve.

DEC also reports to the Marine Parks and Reserves Authority, Conservation Commission (ConCom) and the Forests Products Commission (FPC).

OTHER STATE AGENCIES AND INDUSTRY GROUPS

Other State agencies and industry groups that may be consulted during the assessment process, depending on the location of the proposal, may include the Department for Planning and Infrastructure (DPI), Department of Fisheries, the Marine Parks and Reserves Authority, the Western Australian Fishing Industry Council (WAFIC), or the Department of Water.

Department Industry Tourism Resources (Commonwealth)

For proposals located in Commonwealth waters DoIR notifies the **Department Industry Tourism Resources** (DITR). Grant of permits and tenements are jointly administered by DITR and DoIR on behalf of the joint authority.

Other aspects, including operational matters (such as the assessment and approval of applications to undertake petroleum activity) are administered by DoIR, as a designated authority on behalf of DITR.

Department of Environment and Heritage (DEH) (Commonwealth)

The Department of Environment and Heritage (DEH) administers the EPBC Act and conducts assessments of proposals referred under the Act.

DEH also makes recommendations to the Commonwealth Minister for the Environment regarding ministerial conditions for the approval of petroleum activities referred under the Act.

How do I carry out a risk assessment of my proposal?

DoIR assesses each proposal on a case-by-case basis in terms of the risk that the proposal represents to the environment. This approach is consistent with the assessment procedure of the Environmental Protection Authority and the Department of the Environment and Heritage.

It is the responsibility of the proponent to demonstrate that the environmental risks of the proposal are identified and can be managed to avoid, reduce or mitigate environmental impacts. The Australian standard for risk management *AS/NZS 4360:1999 (Standards Australia)* provides a guide for carrying out risk assessments and *HB203:2000 (Standards Australia)* provides specific guidance on Environmental Risk Management principles and processes.

For each activity outlined in the proposal, the likelihood of an event occurring (such as release of drill fluids) and the consequence of the event (e.g. impact on biological communities) should be identified. For some activities, the environmental risks can be reasonably well quantified, for example the risk of an oil spill occurring, and the risk of the oil spill making contact with sensitive marine environments. For other activities, only qualitative assessment of environmental risks and consequences may be possible, for example the assessment of habitat rehabilitation success.

DoIR supports the use of industry-standard models in quantifying environmental risks, although it is the responsibility of the proponent to provide information on model verification and validation. For any assessment of environmental risks, limitations or uncertainty in the assessment should be presented.

To demonstrate that the environmental risks can be acceptably managed, the proponent should provide details of the procedures that will be followed to avoid, reduce or mitigate the identified environmental risks.

Management procedures could include incorporating decommissioning requirements into project engineering and timing activities to avoid the breeding activities of fauna, seasonal conditions posing a high dieback risk or commitments to rehabilitate an area after the completion of activities.

How soon before carrying out petroleum activities do I need to submit my application?

The minimum lead-time required between submitting the application and the Environment Plan or Environmental Management Plan and carrying out petroleum activities is stated in petroleum legislation. Proposals in sensitive environments should include consultation prior to submission to confirm the likely assessment and referral process.

For onshore exploration or production, the required lead-time is three months or six months in environmentally sensitive areas. For exploration activities in offshore areas, the minimum leadtime required is one month. For production activities in offshore areas, the minimum lead-time is difficult to specify depending on the nature of the development and the particular environmental sensitivities of the area in which the proposal is located.

For onshore proposals requiring clearing assessment under the *EP Act 1986*, the clearing permit applications must be submitted three to six months prior to vegetation disturbance and proponents are recommended to consult with the Native Vegetation Assessment branch of DoIR.

How long will an environmental assessment take?

The time required to obtain approval to proceed with petroleum activities is directly related to the type and location of the proposed operation and the environmental sensitivity of the receiving environment. A combination of factors will determine whether the referral process to the Environmental Protection Authority or the Department of the Environment and Heritage is triggered, which may lead to formal assessment.

There are legislative requirements regarding the timeframes for submission and assessment of applications before proponents can commence activities. The timeframes for assessment and approval of proposals under State jurisdiction are summarised in Section 3.1, and proposals under Commonwealth jurisdiction are summarised in Section 3.2.

What are the administrative arrangements between the Department of Industry and Resources, the Department of Environment and Conservation and the Environmental Protection Authority?

The administrative arrangements between DoIR, EPA and DEC are designed to facilitate the referral process for offshore petroleum proposals. Under these arrangements, proposals that have the potential to cause significant effects on the environment are referred to the EPA under Section 38 of the *EP Act 1986*.

Factors which DoIR take into consideration to determine the 'environmental significance' of a proposal is consistent with those factors considered by DEC's Environmental Services Branch and are detailed in Section 3.1.4 of this document. Proposals that trigger the referral process under the arrangement are formally referred to the EPA for assessment. Proposals that do not trigger the referral process under the arrangement are assessed by DoIR, although DEC's Environmental Services Branch may be notified for their information and advice.

DoIR's website and the Memoranda of Understanding for referral arrangements between DoIR and EPA can be found at <http://www.doir.wa.gov.au/environment/5706D8718E7E437DBBAC9901DE734805.asp>

2 REQUIREMENTS FOR CARRYING OUT PETROLEUM ACTIVITIES

This section provides information on the legislation under which petroleum activities are regulated (Section 2.1), and on the structure and content of an Environmental Management Plan or an Environment Plan (Section 2.2) and OSCP's (Section 2.3) which must be submitted with proposals to carry out petroleum activities.

2.1 Compliance with Legislation

Environmental protection and management of petroleum activities is provided for by petroleum legislation in Western Australia, and a range of other State and Commonwealth legislation and international agreements.

The predominant State, Commonwealth and international environmental legislation and agreements to which petroleum activities must conform are outlined below.

The principal acts governing petroleum activities under State jurisdiction are:

- *Petroleum Act 1967* (: http://www.austlii.edu.au/au/legis/wa/consol_act/pa1967137/);
- *Petroleum Act 1967* Schedule of Onshore Petroleum Exploration and Production Requirements 1991;
- *Petroleum Pipelines Act 1969* : http://www.austlii.edu.au/au/legis/wa/consol_act/ppa1969233/);
- *Petroleum (Submerged Lands) Act 1982*; also known as P(SL)A 1982 (internet: http://www.austlii.edu.au/au/legis/wa/consol_act/pla1982267/);
- *P(SL) Acts Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995* (regulates both State and Commonwealth activities);

- *Environmental Protection Act 1986* (http://www.austlii.edu.au/au/legis/wa/consol_act/epa1986295/);
- *Acts Amendments (Marine Reserves) Act 1997*;
- *Conservation and Land Management Act 1984* (: http://www.austlii.edu.au/au/legis/wa/consol_act/calma1984290/);
- *Fish Resources Management Act 1994* :http://www.austlii.edu.au/au/legis/wa/consol_act/frma1994256/); and the
- *Wildlife Conservation Act 1950* : http://www.austlii.edu.au/au/legis/wa/consol_act/wca1950236/index.html).

The principal acts governing petroleum activities under Commonwealth jurisdiction are:

- *Petroleum (Submerged Lands) Act 1967*; also known as *Commonwealth P(SL)A 1967* (internet: http://www.austlii.edu.au/au/legis/cth/consol_act/pla1967267/index.html);
- *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999* (http://www.austlii.edu.au/au/legis/cth/consol_reg/ploer1999616/);
- *P(SL) Acts Schedule Specific Requirements as to Offshore Petroleum Exploration and Production 1995* (regulates both State and Commonwealth activities);
- *Environment Protection and Biodiversity Conservation Act 1999* (: http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/); and
- *Environment Protection (Sea Dumping) Act 1981* (http://www.austlii.edu.au/au/legis/cth/consol_act/epda1981383/)

The principal international agreement governing petroleum activities in both State and Commonwealth waters is:

- *United Nations Convention on the Law of the Sea 1982* (internet: <http://www.tufts.edu/departments/fletcher/multi/sea.html>)

2.2 Environmental Management Plans and Environment Plans

To carry out petroleum activities, proponents are required to submit an application to DoIR. Proposals under State jurisdiction should be accompanied by four hard copies of the projects Environmental Management Plan (EMP) if the project requires referral to EPA or DEC, otherwise two copies is sufficient.

If in Commonwealth waters, the application should be accompanied by two copies of the Environment Plan (described in Section 1.3.1). Proposals under State jurisdiction will require an EP in place of an EMP when regulations have been enacted to mirror the Commonwealth regulations. The discussion below refers to both Environmental Management Plans and Environment Plans to reflect this transitional stage.

The EMP or EP should identify any potential or actual environmental effects the proposed activities may have and provide the proponent's commitments and procedures to manage, monitor and mitigate potential and actual effects. A comprehensive EMP or EP will facilitate the assessment process by providing sufficient information to determine whether environmental risks are low and that adequate management measures are in place. The content and level of detail of an EMP or EP will depend on the number and significance of environmental aspects and effects associated with the proposal.

Some petroleum activities may require additional or specific information or a different emphasis, depending on the nature of the activity and its location. For example, an EMP or EP for onshore seismic activities may emphasise waste management, rehabilitation commitments and provide aerial photography and maps to aid environmental assessment. An EMP or EP for an offshore seismic operation may emphasise aspects related to vessel waste management and whale-watch procedures (*DoIR, 1998a*), whereas for an offshore drilling activity may emphasise oil spill response procedures or management of drilling fluids (*Cobby and Craddock, 1999*).

Guidance for the development of an EMP or EP is provided below, and reference should also be made to the *Australian Petroleum Production and Exploration Association Code of Environmental Practice 1996 (APPEA 1996)*.

APPEA (1996) provides an extensive list of management issues and actions for onshore and offshore seismic, drilling and development activities, and specific guidelines on waste management, chemical management and oil spill management. For pipelines, reference should also be made to *Australian Pipeline Industry Association Code of Environmental Practice (APIA, 1998)*.

2.2.1 Structure of an Environmental Management Plan or Environment Plan

A basic framework for the structure and content of an Environmental Management Plan or Environment Plan is shown in Table 1. The information in Table 1 is not exhaustive and reference should also be made to *APPEA (1996)*.

Table 1: Suggested structure and content of an Environmental Management Plan or Environment Plan

SECTION	CONTENT
Introduction	Identification of the proponent organisation's corporate environmental policy, purpose and scope of the EMP or EP, applicable State, Commonwealth and international legislation, a description of the proposal's environmental objectives and distribution list of the EMP or EP.
Description of the activity	Description of the facilities and equipment, nature of the operation, geographic location of the proposed operation, operational methodology, timing and duration of key stages of the proposed operation.
Description of the receiving environment	Description of physical environment such as regional and form and climate, description of the biological and ecological environment, proximity of activities to sensitive areas of terrestrial and marine reserves, socioeconomic and cultural environment, maps of the extent of the ecological, social and cultural environments.
Environmental aspects and assessment of environmental effects and risks	<p>Identification of the frequency, severity and duration of the effects and their consequences caused by potential disturbances, discharges and emissions, identification of the direct and indirect effects and risks associated with the proposal, physical environment aspects, biological environmental aspects, social environment aspects, pre-operational aspects such as clearing of land.</p> <p>Operational aspects such as commissioning waste management. Postoperational aspects such as decommissioning, rehabilitation and emergency events such as oil spills and site-specific considerations.</p> <p>This section should detail the companies risk assessment methodology and identify whether the risk assessment process is conducted in accordance with Australian Standards such as AS/NZS4360 and HB203.</p>
Environmental performance objectives and standards	Setting of objectives and standards against which to measure environmental effects and risks. Setting measurable and auditable criteria to measure performance against standards and objectives
Procedures for managing and mitigating risks	Waste management, chemicals and hazardous materials management, drill cuttings and drilling fluids management, produced formation water management, oil spill prevention, and gaseous emissions including greenhouse emissions. Noise, dust and light management, decommissioning and management of physical, biological or social disturbances, and rehabilitation programs.
Roles and responsibilities	Set out a chain of command outlining roles and responsibilities of personnel in relation to implementation, management and review. Specify who has responsibility for compliance with environmental requirements.
Training and education	Systems to ensure employees and contractors are aware of environmental sensitivities, their responsibilities in relation to environmental performance and have appropriate skills and training.
Monitoring, audit and reporting requirements	Schedule of monitoring programs required to detect and re-assess risk during the project's life. Schedule of compliance auditing and a system of review incorporating monitoring and audit results to improve environmental performance. System to ensure records of emissions and discharges are kept and are evaluated for compliance. System to identify and ensure required information is reported internally and also to ensure that incidents and compliance reports on environmental matters are provided to DoIR. A list of incidents that require reporting to external agencies should be included.
Emergency events and contingency planning	Identify sources of risk and develop and implement procedures to minimise risks and potential effects of major incidents such as spills or fires. Oil spill trajectory modelling, identification of oil-sensitive resources and priority protection areas, identification of emergency organisations, responsibilities, resources and call-out details and spill response and cleanup strategies. If some of this information is provided in a separate OSCP, then it does not need to be duplicated in the EMP, however there must be a clear linkage between the two documents.
Consultations	Details on the consultation undertaken during development of the documentation. Ongoing consultation with appropriate organisations while the activity is underway.
Environmental commitments	Summary of the environmental commitments made to manage potential environmental effects.

Preparation of an Environmental Management Plan (EMP) or Environment Plan (EP) must involve recent on-site assessments of potential ecological effects in support of desktop assessments. Specific areas that require attention when developing an EMP or EP include identification of environmental aspects, their relationship with the receiving environment and the potential for significant environmental impact that may result. These are discussed in more detail below.

The differences between an EP and an Environmental Management System (EMS) relate to the scope of the documents. An EMS is typically an organisation-wide document that provides a perspective on all of the organisation's activities, from broad level policy to specific operational tasks, outlined in environmental management procedures. In contrast, the EP is an activity specific document that provides details on the specifics of the proposal, such as the location, receiving environment and operational details, in addition to information on the organisation's corporate policy and environmental objectives.

The EP includes an implementation strategy that provides the operational systems, practices and procedures to ensure that the environmental effects and risks are as low as reasonably practicable and that the environmental performance objectives and standards are met.

2.2.2 Identification of environmental aspects (activities)

Environmental aspects are defined as elements or activities of a project or operation that may result in an impact upon the environment. Emissions or discharges of waste materials are included in this definition of environmental aspects. Environmental effects are defined as the resulting changes to the environment caused by the identified environmental aspects. These definitions are adapted from those given in *ISO 14001*, and *ISO 14004 (Standards Australia 1996a, b)*.

It is important that all environmental aspects are identified at this stage as any aspects overlooked may impede the assessment process and result in unnecessary delays in obtaining environmental approval. All of the environmental aspects of the operation should be identified irrespective of whether or not they are under the control of the proponent. A number of techniques may be used to identify the environmental aspects of an operation including checklists, judgements based on experience, brainstorming, flow charts and scenario analysis. Environmental aspects may be identified through consultation with government agencies, specialist consultants and industry bodies.

In an EMP or EP the environmental aspects of a proposed operation may be effectively presented in a table that details each aspect, describes the associated potential effects and proposes management procedures to avoid reduce or ameliorate the effects. An assessment of the likelihood of the impact and severity of the consequences should also be included. More information on the identification of environmental aspects is available in the *Australian standard for risk management AS/NZS 4360:1999 (Standards Australia, 1995)*.

Environmental aspects differ between petroleum activities, and between phases within an operation. For example, environmental aspects associated with seismic surveys differ from those associated with exploration or production drilling. Environmental aspects will change during the life of a facility, during construction, operation and decommissioning phases of the project. Common environmental aspects that require attention in seeking approval for petroleum activities are provided in Table 2.

Table 2 is not exhaustive and proposals located in environmentally sensitive areas would have additional issues that would require detailed descriptions of the aspects, potential effects and proposed management procedures. Environments that are considered to be sensitive areas include:

- Conservation reserves such as marine parks, sanctuary zones;
- Areas of protected or rare and endangered flora and fauna;
- Areas of significant habitat such as corals, seagrasses, macro algae, wetlands or mangroves; and
- Areas of temporal significance such as breeding or spawning grounds, resting and aggregation areas (*DoIR 1998a*).

Table 2: Common environmental aspects of petroleum activities with the potential for environmental effects

PETROLEUM ACTIVITY	ENVIRONMENTAL ASPECTS
Seismic exploration	Transportation of equipment, fuel and HAZCHEM storage and handling, waste management, clearing of vegetation, construction of access roads ,disease and weed management, timing of activities (in areas of temporal significance) and acoustic disturbance and rehabilitation.
Exploration or production drilling	Transportation of equipment, fuel and HAZCHEM storage and handling, waste management, clearing of vegetation, construction of access roads and drill sites disease and weed management, management of drilling fluids and cuttings, timing of activities (in areas of temporal significance) rehabilitation and lighting.
Construction of a facility	Transport of equipment, fuel and HAZCHEM storage and handling, waste management, clearing of vegetation, disease and weed management, construction of access roads, accommodation facilities and general site works, timing of activities (in areas of temporal significance), decommissioning options, and rehabilitation.
Construction of pipelines	Transport of equipment, fuel and HAZCHEM storage and handling, waste management, clearing of vegetation disease/weed management, trenching, management of hydrostatic test fluids, timing of activities (in areas of temporal significance), decommissioning options and rehabilitation.
Operation of a facility	Discharge of produced formation water, gaseous emissions, greenhouse emissions, flaring, support vessels and transport, fuel and HAZCHEM storage and handling, waste management, quarantine and hygiene, discharge of liquid and solid wastes, emissions of noise and light pollution, work over drilling and production drilling and transfer of petroleum product to transport tankers.
Decommissioning	Removal of infrastructure, transport of equipment, fuel and HAZCHEM storage and handling, waste management, timing of activities (in areas of temporal significance), treatment of residual drilling cuttings piles or contaminated sites and rehabilitation.

2.2.3 Identification of potential environmental effects

The identification of potential effects allows the development of management procedures and strategies to manage those specific effects. The impact identification and assessment process is a key requirement of an Environmental Management Plan (EMP) or an Environment Plan (EP). The operation may impact on the physical, biological or social environments (Table 3).

Table 3 is not exhaustive and advice should be sought from specialist consultants and government agencies for more detailed information.

Table 3: Key potential effects of onshore and offshore activities to the physical, biological and social environment

POTENTIAL EFFECTS	POTENTIAL ENVIRONMENTAL EFFECTS FOR ONSHORE ACTIVITIES	POTENTIAL ENVIRONMENTAL EFFECTS FOR OFFSHORE ACTIVITIES
Potential physical environmental effects	Sedimentation, erosion, disturbance of sensitive areas, soil compaction and disturbance, groundwater disturbance, drainage alteration, surface seepage, drainage lines and creek disturbance and contamination such as hydrocarbons, salts, chemicals.	Sedimentation and turbidity, marine erosion and scouring, disturbance of sensitive areas by submarine cables and pipelines, groundwater disturbance and hydrocarbon and chemical contamination.
Potential biological environmental effects	Disturbance to fauna including breeding seasons or migration paths, noise and light disturbance, disturbance of rare and endangered flora and fauna and threatened ecological communities. Introduction of noxious weeds and vermin, exotic species, flora and animal diseases, encroachment into quarantine areas and fire risks.	Disturbance to fauna including breeding seasons or migration paths. Noise and light disturbance. Disturbance of rare and endangered flora and fauna and threatened ecological communities. Introduction of exotic species, toxicity of drilling fluids or hydrocarbons, smothering and burial of fauna by drilling cuttings and shifts in biological assemblages.
Potential social environmental effects	Disturbance to heritage sites, archaeological sites, scientific study sites Public disruption and disturbance to pastoral or farming activities or horticultural activities, disturbance to aesthetics (visual impact), disturbance to ethnographic sites and limitations to third party access.	Exclusion of third parties from safety zones. Disturbance to heritage sites, disturbance to archaeological sites, disturbance to scientific study sites and disturbance to tourism. Disturbance to public convenience such as recreational fishing, camping, disturbance to marinas, anchorages or ports, disturbance to subsistence Aboriginal fisheries, disturbance to fishing and aquaculture and disturbance to restricted areas such as military training areas. Disturbance caused by increased pressure on mainland supply base.

2.3 Oil Spill Contingency Plans

The primary focus of oil spill management is prevention. Provisions for which should be incorporated into all relevant operating procedures. The secondary focus is the development of oil spill response procedures through the development and maintenance of an Oil Spill Contingency Plan (OSCP).

The OSCP is a project-specific plan, outlining the response structure, strategy and relevant information needed for decision making in the event of a spill. The OSCP is an important part of an application to carry out petroleum activities because the proponent must demonstrate that they have the resources, management structure and relevant skills available for the prevention, containment and clean-up of oil spills.

Contingency planning for onshore activities is desirable, but not required under current petroleum legislation. The development and approval of an OSCP is required for offshore exploration drilling and production activities under the following petroleum legislation:

- *Petroleum (Submerged Lands) Act, 1982*, for offshore activities in State waters; and
- *Petroleum (Submerged Lands) Act, 1967*, for offshore activities in Commonwealth waters.

Under the Commonwealth *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999*, an OSCP is required as part of the proposal's Implementation Strategy (refer to Section 1.3).

Oil Spill Contingency Plans and subsequent updates must be submitted to DoIR for review and approval before exploration drilling or production activities commence within a permit area. The approval process includes a review of the

OSCP by the Department of Planning and Infrastructure on behalf of the WA (National Plan) Marine Pollution Committee ('State Marine Pollution Committee; SMPC). For offshore proposals two hard copies of the OSCP along with the two copies of an EP should be submitted.

The assessment of an OSCP typically takes up to thirty days, providing that amendments to the document are not required. The submission of a comprehensive and detailed OSCP will facilitate the assessment process.

2.3.1 Structure and content of an Oil Spill Contingency Plan

The following guidelines focus on oil spill contingency planning for offshore activities only. Guidelines for the management of onshore spills can be obtained from the *APPEA Code of Environmental Practice (APPEA, 1996)*. The structure of an Oil Spill Contingency Plan (OSCP) is at the discretion of the company.

However, in developing an OSCP it is important to note:

- An OSCP is an operational document for an emergency situation, requiring that the responsibilities of key personnel, response actions and reporting requirements be made clear;
- Relevant environmental, meteorological, oceanographic and oil characteristic information will be used for on-site decision making, and so should be accessible;
- Response strategies should be clear;
- The plan should be subject to regular training simulation and real-time exercises, review and updates; and
- Where relevant information or procedures exist in other company documents such as emergency response plans, these documents should be clearly referenced.

An OSCP should include the components shown in Table 4.

Table 4: Structure and content of an Oil Spill Contingency Plan

SECTION	CONTENT
Introduction	<p>Objectives of the plan, statutory requirements and scope. All permit areas and activities covered by the plan should be clearly identified and accompanied by response plans i.e. NATPLAN, State plans, and Australian Marine Oil Spill Centre plans.</p> <p>Interface with other relevant company documents such as an Environmental Management System, emergency response documents and jurisdictional responsibilities of the company, government departments and oil spill response agencies.</p> <p>Triggers for implementation. i.e. the OSCP should be set into action on the release of any hydrocarbon-based substance, including drilling fluids.</p>
Planning and strategy development	<p>Initial response priorities consistent with emergency response procedures. Response team structure and responsibilities, with reference to other company documents where relevant.</p> <p>Structure of a tiered response: the system developed should be clear and consistent with that outlined in the <i>State Plan Incident Risk Assessment</i> including the likely source of a spill and the potential volumes spilled.</p> <p>Environmental risk assessment incorporating the mapping of sensitive and high risk areas, and formulation of priority protection areas. Trajectory modelling outlining the resources available and their limitations. Tracking of oil movement for the different classifications of spills. Treatment and clean-up strategy identified for offshore, near shore and onshore scenarios and habitats.</p> <p>Use of dispersants: the policy and approval process for dispersant use should be clear i.e. for the provision of the disposal of oily wastes.</p>
Response action plan	<p>Call out mechanism and notification plan (particularly useful in a schematic form).</p> <p>Key contacts register: these contact details should be given up-front. Reporting requirements and format. An Oil Spill Response Action Plan can be provided in schematic form and a treatment strategy.</p>
Contact directory	<p>Key company personnel, spill response agencies, Commonwealth Government authorities, State Government authorities, local government authorities, regional emergency institutions, disposal sites, contractors and support resources.</p>
Equipment directory	<p>Response equipment available from a number of sources, combining AMOSC and NATPLAN resources. Identification of company resources available on-site and equipment appraisal and serviceability.</p>
Data directory	<p>Oceanographic and climatic information. Environmental resources such as specific locations of sensitive resources. Oil characteristics and behaviour, predicted oil spill trajectory information. Dispersant characteristics and data. Occupational Health and Safety issues, including Material Safety Data sheets.</p>

SECTION	CONTENT
Maintenance of the OSCP	Schedule for OSCP maintenance and reviews, schedule for oil spill response exercises and training and responsibilities for maintenance of the OSCP.

2.3.2 Interface with other plans and documents

The OSCP must be consistent with the *National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances* and the *Western Australian Marine Oil Pollution Emergency Management Plan (WA (National Plan); WestPlan – MOP)* and the *Marine Pollution Committee, 2000*), which would take effect in the event of a significant spill.

The OSCP should be developed in consultation with relevant agencies such as the State Combat Committee, the Australian Maritime Safety Authority and DoIR.

The National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (NATPLAN; AMSA 1996, 1998) was developed by Commonwealth and State governments, and is administered by the Australian Marine Safety Authority.

This plan combines the efforts and resources of the Commonwealth and State Governments and the oil and shipping industry to combat oil spills in the marine environment.

WestPlan – Marine Oil Pollution (MOP)

Supporting the NATPLAN for WA is the *Western Australian Marine Oil Pollution Emergency Management Plan (WestPlan – Marine Oil Pollution (MOP); WA (National Plan) Marine Pollution Committee, 2000)*. The State Marine Pollution Committee administers this plan. The plan details the arrangements between State government agencies and industry to combat marine oil pollution within WA. It prescribes responsibilities and procedures, and provides a basis for coordination of resources for responding to oil spill events.

Australian Marine Oil Spill Centre

The Australian Marine Oil Spill Centre (AMOSC) is an initiative of the Australian oil and gas industry, providing part of the oil pollution response arrangements in Australia.

AMOSC identifies its principal roles as:

- Provision of oil spill response personnel and equipment on 24 hour stand-by;
- Provision of oil spill training services at the training centre in Geelong; and
- Administration of the oil industry mutual aid arrangements where industry oil spill response resources are available to the NATPLAN, through AMOSC.

More information to assist with the development of an OSCP can be obtained in *A Guide to Contingency Planning for Oil Spills on Water (IPIECA, 1991)*.

3 ASSESSMENT OF PETROLEUM PROPOSALS

DoIR's Petroleum Branch, is responsible for the assessment of the acceptability of petroleum proposals in Western Australia. The process for the approval of proposals differs in State and Commonwealth areas of jurisdiction as described below in Sections 3.1 and 3.2 respectively.

3.1 Proposals under State Jurisdiction

The approval process in State areas of jurisdiction is summarised in Figure 2, which shows:

- Actions required of the proponent;
- Actions carried out by DoIR; and
- Triggers for referral to EPA.

Each stage in the approval process shown in Figure 2 is described in detail below.

3.1.1 Pre-submission consultation

Before the submission of the application, proponents are encouraged to consult with DoIR's Environment Division, Petroleum Branch, regarding the environmental acceptability of their proposals. DoIR can assist by clarifying specific requirements related to the operation, for example on issues or aspects specific to the location of the operation, or advise which other agencies to contact where appropriate.

The responsibility lies with proponents to identify the jurisdictions in which their proposal occurs and the legal requirements for the project. It is also the proponent's responsibility to identify the environmental aspects of their operation, the potential environmental effects and make commitments to avoid, reduce or mitigate environmental effects.

3.1.2 EPBC Act process

It is a requirement of the EPBC Act that the proponent determine whether the proposal has, will have or is likely to have a significant impact on a matter(s) of NES (refer to Section 1.3.2 for details on matter(s) of NES). The proponent makes a decision on whether or not to refer the proposal and initiate the EPBC Act process.

The assessment and approval process is outlined in the EPBC Act. Once a proposal has been referred to the Commonwealth Environment Minister, the Commonwealth Environment Minister assumes responsibility for determining whether his or her approval under the EPBC Act is required, setting a level of assessment, and determining whether to give approval and what (if any) conditions are to be set on approval.

The Department of the Environment and Heritage provides technical assistance to the Commonwealth Environment Minister by reviewing proposals and providing recommendations on appropriate levels of assessment and in the preparation of an assessment report on which to conditions of approval are set. The EPBC Act process is summarised in Figure 3.

Figure 2: Environmental Assessment Process in State Jurisdiction.

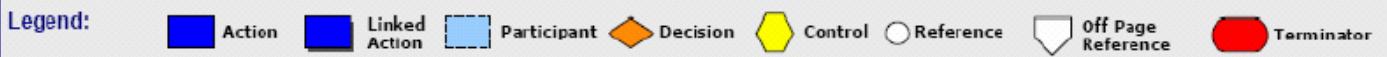
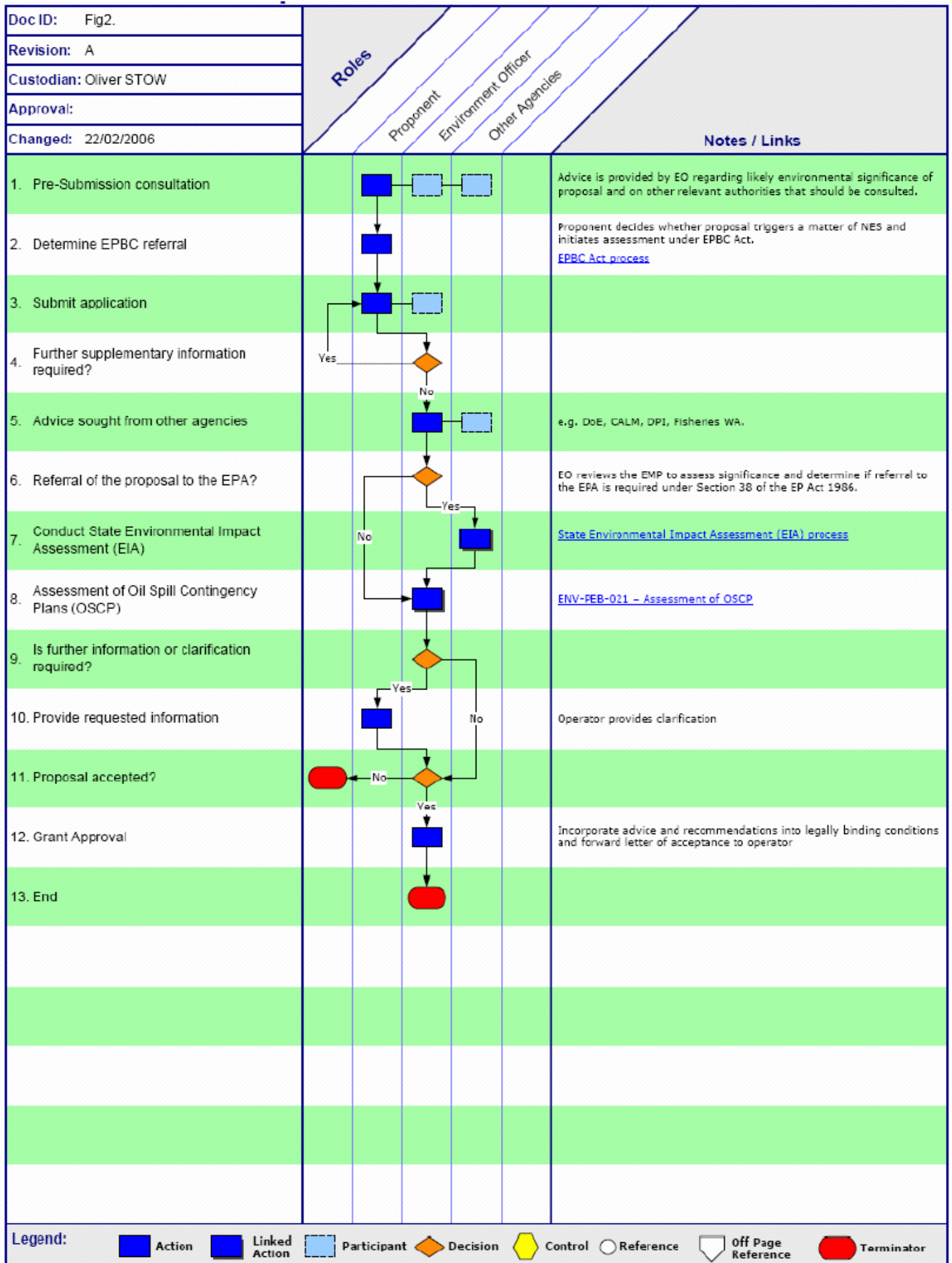
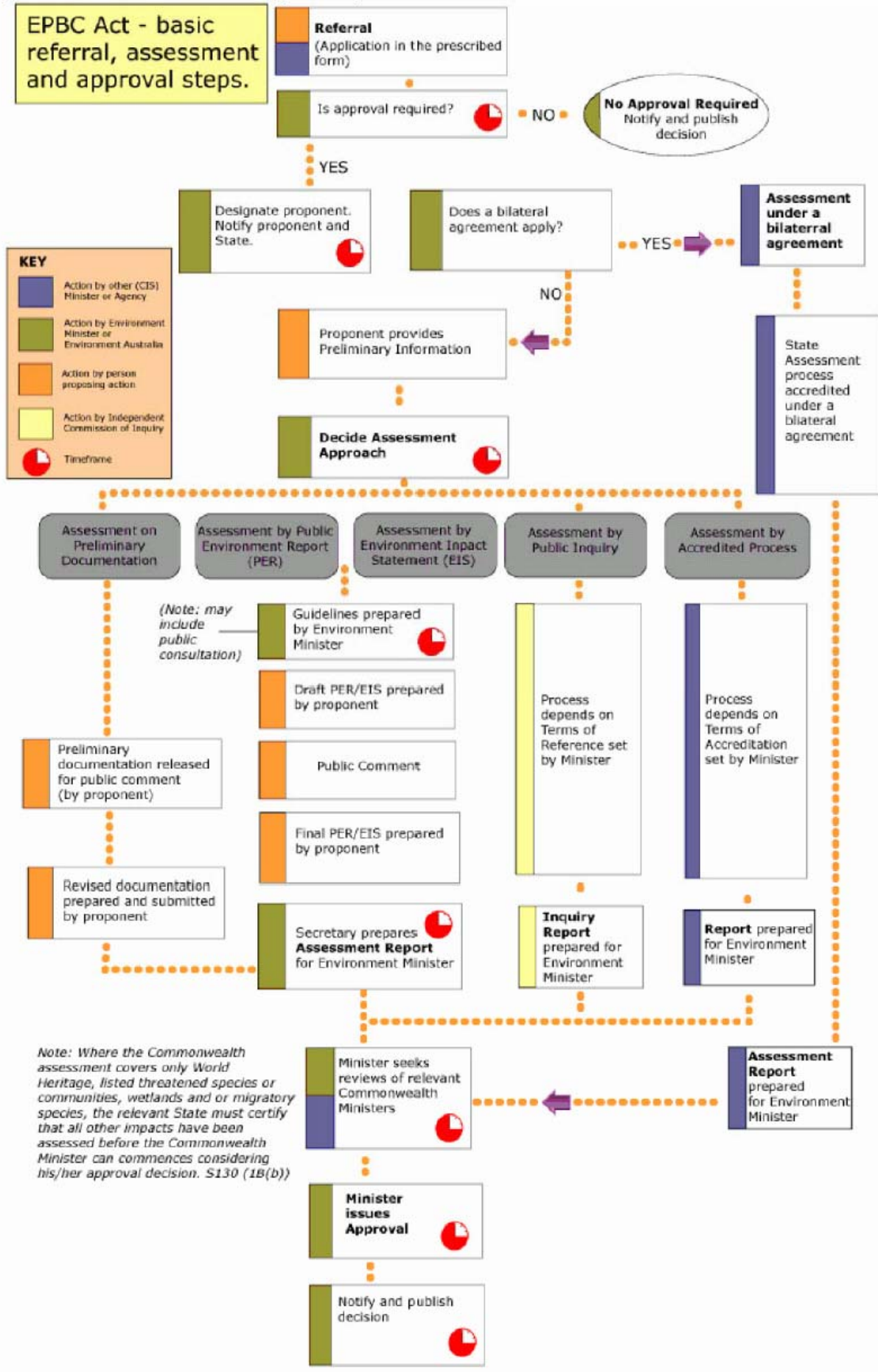


Figure 3: Assessment and Approval processes under the EPBC Act 1999



The level of assessment set by the Commonwealth Environment Minister will depend on the nature of the impacts on a matter(s) of National Environmental Significance (NES).

The levels of assessment available to the Commonwealth Environment Minister include: Assessment on a case-by-case basis that may require completion of one or more of the following assessment documents:

- Preliminary Documentation;
- Public Environment Report;
- Environmental Impact Statement;
- Inquiry; and
- An accredited assessment process under a Bilateral Agreement or Ministerial declaration.

The differences between these levels of assessment relate to the public review period and the detail of documentation required.

3.1.3 Clearing Permit Process

If any native vegetation is to be cleared, then a clearing permit under the *Environmental Protection Act 1986* will be required and the assessment will be conducted by DoIR appointed assessors. Clearing applications are assessed against 10 principles outlined in Schedule 5 of the *Environmental Protection Amendment Act 2003*.

There are circumstances in which a clearing permit is not required (i.e. exemptions). Exemptions include mineral and petroleum exploration activities, and mining activities designated as 'low impact'. Applicants should review their application in light of the exemptions outlined in the documents below:

- Schedule 6 of the *Environmental Protection Act 1986*; and
- *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*

These publications are available at: State Law Publisher's website www.slp.wa.gov.au/.

Preparing an application

Please note the following points when preparing an application:

- Consult the guidance material that is included on the DoIR website;
- Contact DoIR's [Native Vegetation Assessment Branch](#) prior to submission of an application to streamline the assessment process; and
- Environmental Management Plans (see [Guidance Material and Publications](#)) are required to be submitted with the clearing permit application. In the case of State Agreements, applicants may be required to submit additional information regarding environmental matters.

3.1.4 Approval Process under Petroleum Acts

For proposed petroleum activities, proponents must submit an application form to DoIR's Director, Petroleum and Royalties Division. The application form must be accompanied by two copies of the Environmental Management Plan (EMP) that provides background information regarding the proposal and the receiving environment, and the environmental issues and potential effects of the proposal, as outlined in Section 2.2.

The EMP is an integral component of the assessment phase; the EMP assists DoIR to determine if the proponent can satisfactorily manage potential effects associated with the proposal, and whether the proposal warrants referral to the EPA under Section 38 of the *EP Act 1986*. In offshore areas, two hard copies of an Oil Spill Contingency Plan must also be submitted for exploration or production drilling as outlined in Section 2.3.

The proponent should advise DoIR on whether the proposal has been referred (or is intended to be referred) to the Commonwealth Environment Minister under the EPBC Act.

Upon receipt of a proposal, DoIR will review the application and accompanying EMP to obtain an understanding of the proposed operation. In the event that an EMP is not submitted with the application form, or if the content of the EMP is insufficient for the department to advise on approval or referral of the proposal, DoIR will request further information from the proponent. DoIR can not proceed with assessment of the proposal until all necessary environmental documentation and supplementary information is received.

Advice sought from other agencies

DoIR will seek advice from other agencies when there are special issues of concern such as effects on fisheries or conservation areas. These agencies may include the Department of Environment and Conservation, Department of Planning and Infrastructure and Department of Fisheries. Situations where the department will seek advice from other agencies are described in more detail in Section 3.4.

Referral of proposal to the Environmental Protection Authority

Based on the nature of the proposal, location and related environmental aspects, and management commitments outlined in the proposal, DoIR will either assess the proposal or refer the proposal to the Environmental Protection Authority (EPA). Both DoIR and EPA carry out assessment of the environmental significance of proposals on a case-by-case basis.

To facilitate the referral of offshore petroleum proposals in State waters in Western Australia, DoIR has developed an administrative arrangement with the EPA and the Department of Environment and Conservation (formerly DoE). The referral arrangements are based on the following administrative and legislative framework:

- DoIR as the decision-making authority defined in Section 38 of the *EP Act 1986*, will refer petroleum proposals in accordance with Section 38 (1) of the Act, and refer to the EPA a proposal that appears likely, if implemented, to have a significant effect on the environment;
- DoIR will refer offshore proposals to the EPA that are within State Marine Reserves and Parks in accordance with the *New Horizons in Marine Management policy (Government of Western Australia, 1994)* and the *Acts Amendments (Marine Reserves) Act 1997*;
- DoIR will refer all other proposals likely to have a significant impact on offshore areas of State jurisdiction in accordance with Section 38 (1) of the EP Act; and 35
- DoIR will refer all offshore petroleum proposals that occur within a distance of 3 nm from the Western Australian mainland coastline or islands within Western Australian State waters.

The department uses the same criteria as the EPA to determine whether a proposal has the potential for significant effects (*EPA, 2002*) and are based on the following factors:

- Character of the receiving environment and the use and value which society has assigned to it;
- Magnitude, spatial extent and duration of anticipated change;
- Resilience of the environment to cope with change;
- Confidence of prediction of change;
- Existence of policies, program, plans and procedures against which the need for applying the environmental impact assessment process to a proposal can be determined;
- Existence of environmental standards against which a proposal can be assessed; and
- Degree of public interest in environmental issues likely to be associated with a proposal.

Circumstances where proposals are likely to trigger referral to the EPA are summarised in Tables 5 and 6 for onshore and offshore activities respectively. Notwithstanding the administrative arrangements between DoIR, EPA and DEC, the EPA retains the right to call in any proposal for assessment, should it consider there is the potential for significant effects on the environment.

Under the State Environmental Impact Assessment (EIA) process in Western Australia, a referral of petroleum proposals may be triggered by DoIR, EPA, and the proponent or by community members.

Please refer to section 3.1.8 for further detail on the EPA assessment processes.

Assessment of an application and Environmental Management Plan

For proposals either not referred to the EPA or referred and not assessed formally, DoIR will carry out the assessment and set environmental conditions. The department assesses the submitted environmental documentation to ensure that proponents have:

- Identified all environmental aspects and potential effects of their proposal;
- Assessed the likelihood and consequence of the identified aspects;
- Provided adequate management or mitigatory actions for identified potential effects; and
- Complied with the requirements of all relevant petroleum legislation.

During the assessment process, the decision-making authority (DoIR) may require additional information or clarifications on some aspects of the application before the documentation is accepted. The assessment and approval procedure can not proceed until the required information is provided.

3.1.5 Assessment of Oil Spill Contingency Plans

DoIR is responsible for the assessment and approval of Oil Spill Contingency Plan's (OSPC) related to petroleum proposals. The department then forwards the OSCP to the State Marine Pollution Committee (SMPC) for advice during the environmental assessment process. The assessment of OSCP's is shown in Figure 4. For proposals located in sensitive areas, DoIR may also forward the OSCP to the Department of Environment and Conservation (State),

3.1.6 Setting of approval conditions

For proposals approved by DoIR, the Minister for Resources sets ministerial conditions governing the operational and environmental aspects of the proposed activity. If a proposal is referred to the EPA and informally assessed, DoIR will incorporate any advice provided by the EPA as part of conditions set by the Minister for Resources. For proposals formally assessed by the EPA, the EPA makes recommendations for environmental conditions in the form of a report to the Minister for the Environment. The Minister then sets environmental conditions based on these recommendations. As these conditions are made legally binding under the *Environment Protection Act 1986*, DoIR does not duplicate the conditions but ensures that any approvals granted by DoIR are consistent with conditions set by the EPA.

3.1.7 Proponent receives environmental acceptance and approval of proposal

Upon acceptance of all environmental documentation, the proponent is notified that the proposal has been accepted and ministerial conditions regulating the operation have been set. Proponents are reminded that environmental acceptance is only one component of the approval process under petroleum legislation and an activity can not commence until all other required approvals are in place.

Table 5: Guidelines on the types of onshore proposals likely to trigger automatic referral to EPA under the EP Act 1986

Type of Activity	Protected areas (a)	Red Book areas (b)	Sensitive riparian/ground water areas ©	Other State areas (d)	Potential for significant impact
Seismic or other ground disturbing surveys	Refer to EPA	Refer to EPA	Refer to EPA	Not referred to EPA (Assessed by DoIR)	Refer to EPA
Drilling	Refer to EPA	Refer to EPA	Refer to EPA	Not referred to EPA (Assessed by DoIR)	Refer to EPA
Facility (construction, installation, operation, modification and decommissioning)	Refer to EPA	Refer to EPA	Refer to EPA	Not referred to EPA (Assessed by DoIR)	Refer to EPA
Pipeline (construction, installation, operation, modification and decommissioning)	Refer to EPA	Refer to EPA	Refer to EPA	Not referred to EPA (Assessed by DoIR)	Refer to EPA

Notes:

- i) Proposals that are wholly or partly within existing Conservation *and Land Management Act* 1984 reserves are forwarded by DoIR to CALM under other consultative arrangements. CALM may recommend that such proposals require referral to the EPA.
 - ii) Proposals that CALM considers may result in a significant impact on threatened ecological communities, priority listed ecological communities, rare and/or threatened flor or fauna listed under the *Wildlife Conservation Act* 1950 or priority flora or fauna will be referred to the EPA.
 - iii) Proposals that require native vegetation clearing will be assessed in accordance with the *Environmental Protection Act* 1986 and *Environmental Protection (Clearing of Native Vegetation) Regulations* 2004. The native vegetation clearing process is covered by a separate administrative arrangement between DoIR and the DoE. Proposals that are considered to be environmentally significant may be referred to the EPA.
- a) Protected areas include:
- Conservation Reserve
 - Threatened Ecological Community
 - World Heritage Property
 - Bush Forever Site
 - Regional Park
 - Biosphere Reserve
 - Soil Reference
 - Site
 - Heritage Site.
- b) Several Red Book Areas have been formally replaced by endorsed CALM Regional Management Plans.

- c) For example a salt lake, an estuary, a wetland or system of standing water, or in a position from which an oil spill could enter any of the above, or a designated groundwater area or within 2km of the coastline, or having an impact on Environmental Protection Policy lakes and wetlands, conservation category wetlands, Ramsar wetlands and sites listed under JAMBA or CAMBA.
- d) Sites that are wholly or partly within 2km of the boundary of a declared occupied townsite or a Private Conservation Reserve should be referred to the EPA.

3.1.8 State Environmental Impact Assessment process

The State Environmental Impact Assessment (EIA) process is outlined in the *EP Act 1986*. All applications referred to the EPA are assessed on a case-by-case basis to allow for specific issues and effects associated with proposals to be considered. Once a proposal has been referred to the EPA, the EPA assumes responsibility for setting a level of assessment, and determining the environmental acceptability of the proposal. The Department of Environment and Conservation provides technical assistance to the EPA by reviewing proposals and providing recommendations on appropriate levels of assessment and Ministerial conditions. The Department of Environment and Conservation also provides advice to the Minister for the Environment and administers the *EP Act 1986*. The State EIA process is summarised in Figure 2.

The level of assessment set by the EPA will depend on the nature of the environmental effects and the level of public interest associated with the operation (Table 7). The levels of assessment available to the EPA include non-assessment, informal review or formal assessment. The differences between these levels of assessment relate to the public review period and the detail of documentation required.

Table 6: Guidelines on the types of offshore proposals likely to trigger automatic referral to EPA under the EP Act 1986

Activity	CALM Marine Conservation Reserves ¹						Other Marine Areas			
	Marine Nature Reserves	Marine Parks ⁴				Marine Management Area		Other Marine Protected Areas ¹⁰	Other WA Coastal Waters	Commonwealth Waters
		Sanctuary Zone	Recreational Zone	Special Purpose Zone ⁵	General Use Zone ⁶	Special Protected Zones	Unzoned			
Seismic survey (airgun towed array)	closed (for minor extensions of adjacent surveys refer to EPA)	closed (for minor extensions of adjacent surveys refer to EPA)	closed (for minor extensions of adjacent surveys refer to EPA)	closed	DolIR refers to EPA	DolIR refers to EPA	DolIR seeks advice from CALM ^{8,9}	DolIR refers to EPA	Outside EPA jurisdiction. Assessed and managed by DolIR	
Exploration or appraisal drilling	closed	closed	DolIR refers to EPA	DolIR refers to EPA	DolIR refers to EPA	DolIR refers to EPA	DolIR seeks advice from CALM ⁸	DolIR refers to EPA, if within 3 nm of coast, islands or intertidal reefs	Outside EPA jurisdiction. Assessed and managed by DolIR	
Production development and/or pipelines ⁷	closed	closed	DolIR refers to EPA	DolIR refers to EPA	DolIR refers to EPA	DolIR refers to EPA	DolIR refers to EPA	DolIR refers to EPA	Outside EPA jurisdiction. Assessed and managed by DolIR	

¹ Notwithstanding the MoU administrative arrangements with DolIR, the EPA reserves the right to call in any proposal for assessment. Any member(s) of the public also have the right to refer a proposal should they consider there is potential for significant effects on the environment.

² Activities in State or Commonwealth waters may also require referral to DEH under the *Environment Protection and Biodiversity Conservation Act 1999*.

³ DolIR will inform CALM Marine Branch of any proposals in existing Marine Conservation Reserves or areas indicated in the Marine Parks & Reserves Schedule Working Group Report (1994). CALM will consult with MPPRA.

⁴ Drilling and development are not permitted in Ningaloo Marine Park.

⁵ Drilling and development are permitted in parts of special purpose or general use zones, pending EPA assessment.

⁶ All intertidal zone seismic proposals and also seismic proposals in shallow water (<10m) in turtle breeding areas during turtle breeding season require referral to the EPA. Seismic proposals which may affect migrating vehicles or are located in whale mating/calving areas (e.g. Buccaneer Archipelago area) in the breeding season also require referral to the EPA.

⁷ Additional production wells drilled from an existing production facility (deviated wells) would not normally require referral and would be managed by DolIR consistent with the existing EPA environmental conditions.

⁸ DolIR seeks advice from CALM as to whether the proposal is consistent with the Management Plan, or is otherwise environmentally significant (for example because of potential for impacts on breeding turtles from artificial lighting), in order to determine if referral to the EPA is required.

⁹ Protected areas other than those managed under the CALM Act. For example areas protected under the *Fish Resources Management Act 1994* such as the Albatross Islands, areas protected under the *Rodney Island Authority Act 1997*, historic wreck sites, Ramsar sites and World Heritage Areas.

Table 7: Distinctions between EIA levels of assessment

LEVEL OF ASSESSMENT		ENVIRONMENTAL EFFECTS	PUBLIC INTEREST IN PROPOSAL
Not assessed	Not assessed by EPA	Insignificant	Minimal
Informal assessment	Informal Review with Public Advice (IRPA)	Potential effects easily managed	Minimal
Formal EIA process	Environmental Protection Statement (EPS)	Significant effects but relatively easily managed	Local community or special interest groups
	Proposals unlikely to be Environmentally Acceptable (PUEA)	Significant effects such that the proposal is unlikely to be approved	Major public interest
	Public Environmental Review (PER)	Significant effects not easily managed	Major public interest
	Environmental Review and Management Plan (ERMP)	Effects have strategic environmental implications	State-wide interest

Proposals that are considered not to warrant assessment under the *EP Act 1986* are referred back to DoIR, who assess and assign environmental conditions to the proposal upon approval of the environmental documentation (Figure 2). The EPA may determine that no assessment is necessary if the referred proposal is considered to have environmentally insignificant effects associated with it.

An assessment level of 'informal review with public advice' is applied to proposals for which the EPA is satisfied that the environmental effects associated with the proposal can be acceptably managed, or that the environmental effects are not significant to warrant formal assessment.

Proposals are assessed formally where environmental effects are perceived to be significant, or where there is a high degree of public interest. The EIA process is designed to allow for public comment on assessed projects, or appeal on the level of assessment set.

There are five levels of formal assessment available to the EPA:

- Assessment on Referral Information (ARI);
- Environmental Protection Statement (EPS);
- Proposals unlikely to be Environmentally Acceptable (PUEA);
- Public Environmental Review (PER); and
- Environmental Review and Management Program (ERMP). Information on the EPA's environmental impact assessment procedures is available at:

<http://www.epa.wa.gov.au/template.asp?ID=2&area=EIA&Cat=EIA+Process+Information>

The EPA provides the proponent with guidelines for preparing assessment documents if a formal assessment is undertaken. Changes to the EIA process to expedite the assessment of proposals following amendments to the *EP Act 1986* are discussed in *Amendments to the Environmental Protection Act 1986 (Government of Western Australia, 1997b)*.

The length of time allocated for public submission varies according to the level of assessment (see Table 9). The time required to develop the EIA documents will depend on the location of the proposal and site-specific effects of the operation. The development of a comprehensive EMP during the application stage will assist with the development of the EIA document, and minimise delays in the assessment.

After the public review period has ended, the EPA summarises the public submissions. The proponent must then address the issues raised in the submissions. During its assessment of a proposal, the EPA takes into account the issues raised in the submissions and the proponent's response to these submissions.

Upon completion of formal assessment, the EPA prepares a report detailing the environmental issues and effects of the proposal, and makes recommendations on managing these issues and effects. This report is then submitted to the Minister for Environment who makes a decision on approval based on the advice provided by the EPA. The Minister for Environment will set legally binding conditions on the proposal under the *EP Act 1986* before giving approval. The proposal will then be referred back to DoIR to set additional conditions under petroleum legislation (if required) before final environmental approval of the proposal is granted.

The EIA process allows for appeals to the Minister for Environment under the *EP Act 1986*.

The *EP Act 1986* allows for appeals regarding:

- Whether a project is assessed formally or informally and the level of formal assessment set; and

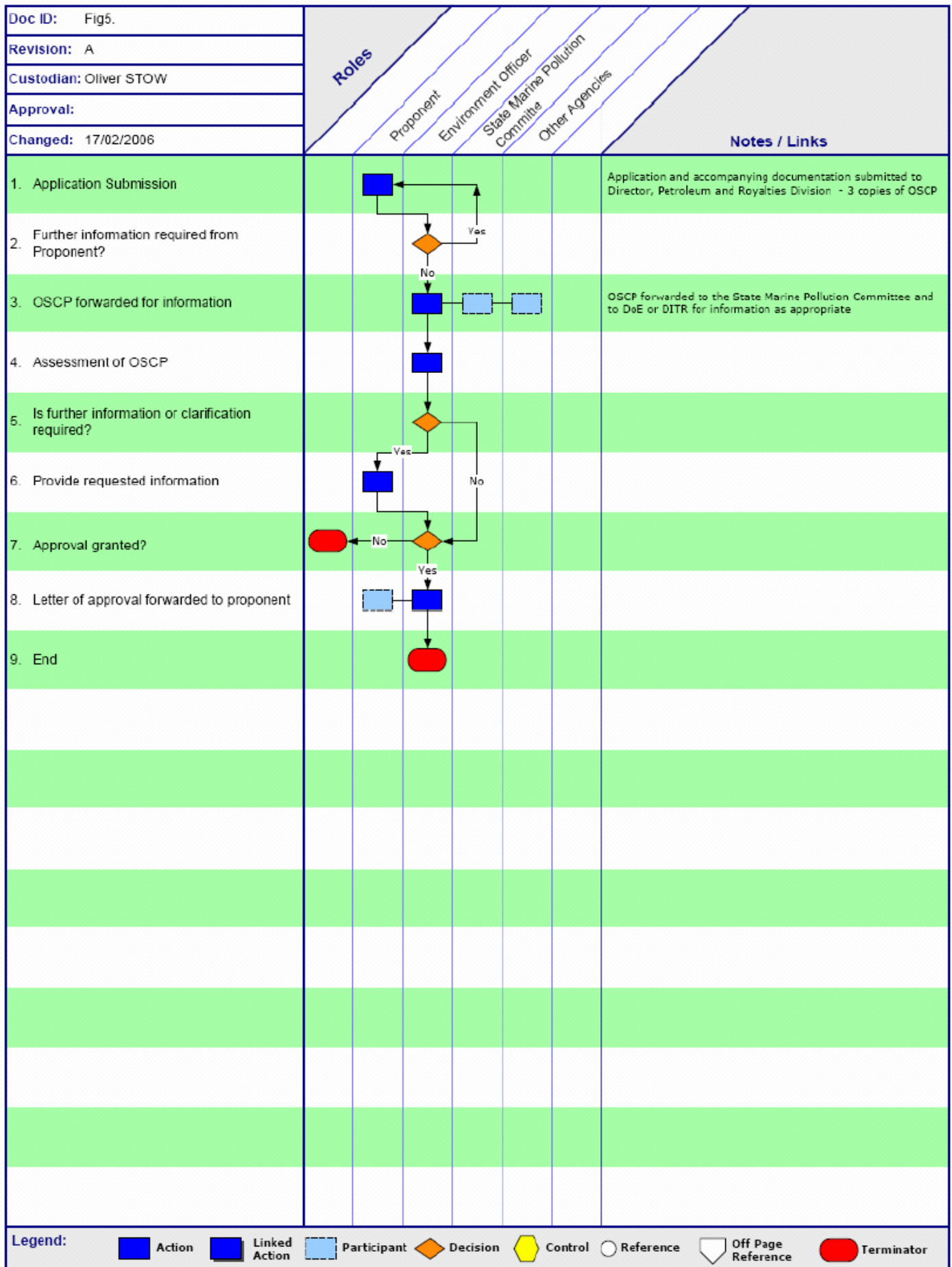
- The EPA's assessment report, recommendations and draft ministerial conditions.

Proponents have 14 days to appeal against the Ministerial conditions set upon the proposal.

Table 8: Indicative timeframes for the various stages in assessment of petroleum proposals in State jurisdiction of Western Australia

Level of assessment	Development of documents	Assessment / referral by DoIR	Assessment by EPA	Public review period	Summary of public submissions	Condition setting and approval
Proposal not referred to EPA	EMP	1 – 4 weeks	-	-	-	1 – 2 weeks
Proposal referred to EPA, not assessed or informal review	EMP	1 – 4 weeks	Dependent on the nature of the 2 weeks + appeals determination	-	DoIR sets conditions	1-2 weeks
Proposal referred to EPA, (ARI) level of assessment	EMP	1 – 4 weeks	Dependent on the nature of the proposal	2 weeks	-	DEC 2 weeks DoIR 1 – 2 weeks
Proposal referred to EPA, formal PUEA level of assessment	EMP	1 – 4 weeks	Dependent on the nature of the proposal	2 weeks to appeal PUEA assessment	-	Proposal goes no further unless Minister upholds appeal
Proposal referred to EPA, formal EPS level of assessment	EMP and EPS	1 – 4 weeks	Dependent on the nature of the proposal	2 weeks	6 weeks	Minister of Environment 4 weeks. DoIR 1 – 2 weeks
Proposal referred to EPA formal PER level of assessment	EMP and PER	1 – 4 weeks	Dependent on the nature of the proposal	4 – 8 weeks	6 weeks	Minister of Environment 4 weeks. DoIR 1 – 2 weeks
Proposal referred to EPA, formal ERMP level of Assessment	EMP and ERMP	1 – 4 weeks	Dependent on the nature of the proposal	10 – 12 weeks	6 weeks	Minister of Environment 4 weeks. DoIR 1 – 2 weeks

Figure 4: Assessment of an Oil Spill Contingency Plan



Legend: Action Linked Action Participant Decision Control Reference Off Page Reference Terminator

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3.2 Proposals under Commonwealth Jurisdiction

The discussion on the Commonwealth environmental approval process below provides information on:

- Actions required of the proponent;
- Actions carried out by DoIR and DITR; and

Each stage in the approval process shown in Figure 5 is described in detail below.

3.2.1 Pre-submission consultation

Before the submission of an application, proponents are encouraged to consult with DoIR's Petroleum Branch regarding the environmental acceptance for their proposals. DoIR can assist by clarifying specific requirements related to the operation, for example on issues or aspects specific to the location of the operation, or advice on contacting other agencies where appropriate to assist in identifying the potentially significant effects of the proposal.

The responsibility lies with proponents to identify the jurisdictions in which their proposal occurs and identify the legal requirements regarding management of the project. It is also the proponent's responsibility to identify the environmental aspects of their operation, the potential environmental effects, and make commitments to avoid, reduce or mitigate environmental effects.

3.2.2 EPBC Act process

It is a requirement of the EPBC Act that the proponent determine that the proposal has, will have or is likely to have a significant impact on a matter(s) of National Environmental Significance (NES) (refer to Section 1.3.2 for details on matter(s) of NES). The proponent makes a decision on whether or not to refer the proposal and initiate the EPBC Act process.

The EPBC Act assessment and approval process (including assessment options available) is described earlier in Section 3.1.3 and shown in Figure 3.

3.2.3 Approval Process under *Petroleum (Submerged Lands) Act 1967*

Proposals located offshore from Western Australia between 3 nm and 200 nm (or continental shelf to 350 nm) are situated in Commonwealth waters and are under the joint jurisdiction of the joint authority (refer to Section 1.2.2). Proponents must submit an application form to DoIR's Director Petroleum and Royalties Division.

Under the Commonwealth *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999*, the application form must be accompanied by two copies of the Environmental Plan that provides background information regarding the proposal and the receiving environment, and the environmental aspects and potential effects of the proposal (refer to Section 1.3). In offshore areas, the application and Environmental Plan must also be accompanied by two hard copies of an OSCP for exploration or production drilling as outlined in Section 2.3. The proponent should advise DoIR on whether the proposal has been referred (or is intended to be referred) to the Commonwealth Environment Minister under the EPBC Act.

If the information in the Environmental Plan is insufficient for DoIR to advise on approval or referral of the proposal, DoIR will request further information from the proponent. DoIR can not proceed with an assessment of the proposal until all necessary environmental documentation and supplementary information is received.

Advice sought from other agencies

DoIR will seek advice from other agencies if necessary during the assessment. These agencies include Department of Environment and Conservation, Department of Planning and Infrastructure, Department of Fisheries and Department of the Environment and Heritage. Situations where DoIR will seek advice from other agencies are described in Section 4.0.

Assessment of an application and Environmental Plan

The joint authority or DoIR (representing the designated authority) assesses the application and Environment Plan to ensure that proponents have:

- Identified all environmental aspects of their proposal;
- Undertaken a risk assessment of all environmental aspects;
- Identified potentially significant effects;
- Provided adequate management or mitigating actions for identified effects;
- Complied with the requirements of all applicable petroleum legislation; and
- Complied with all applicable environmental legislation.

If the authorities assessing the plan determine that the significant effects associated with the proposal can be managed and the management commitments are satisfactory, as outlined by the proponent in the Environmental Plan, the proposal and Environmental Plan will be approved subject to Ministerial conditions (a decision on the acceptability of an Environmental Plan will be made within a 30 day period). All conditions set are legally binding and must be observed.

During the assessment process, the decision-making authority (DoIR) may require additional information or clarification on aspects of the proposal before the environmental documentation is accepted. The assessment and approval procedure can not proceed until all the required information is provided.

3.2.4 Assessment of Oil Spill Contingency Plans (OSCP)

As with the State assessment process, for offshore activities, the proponent must submit an OSCP with their application and EP. The assessment of OSCP is carried out in parallel with assessment of the EP, as described earlier in Section 3.1.5 and shown in Figure 4.

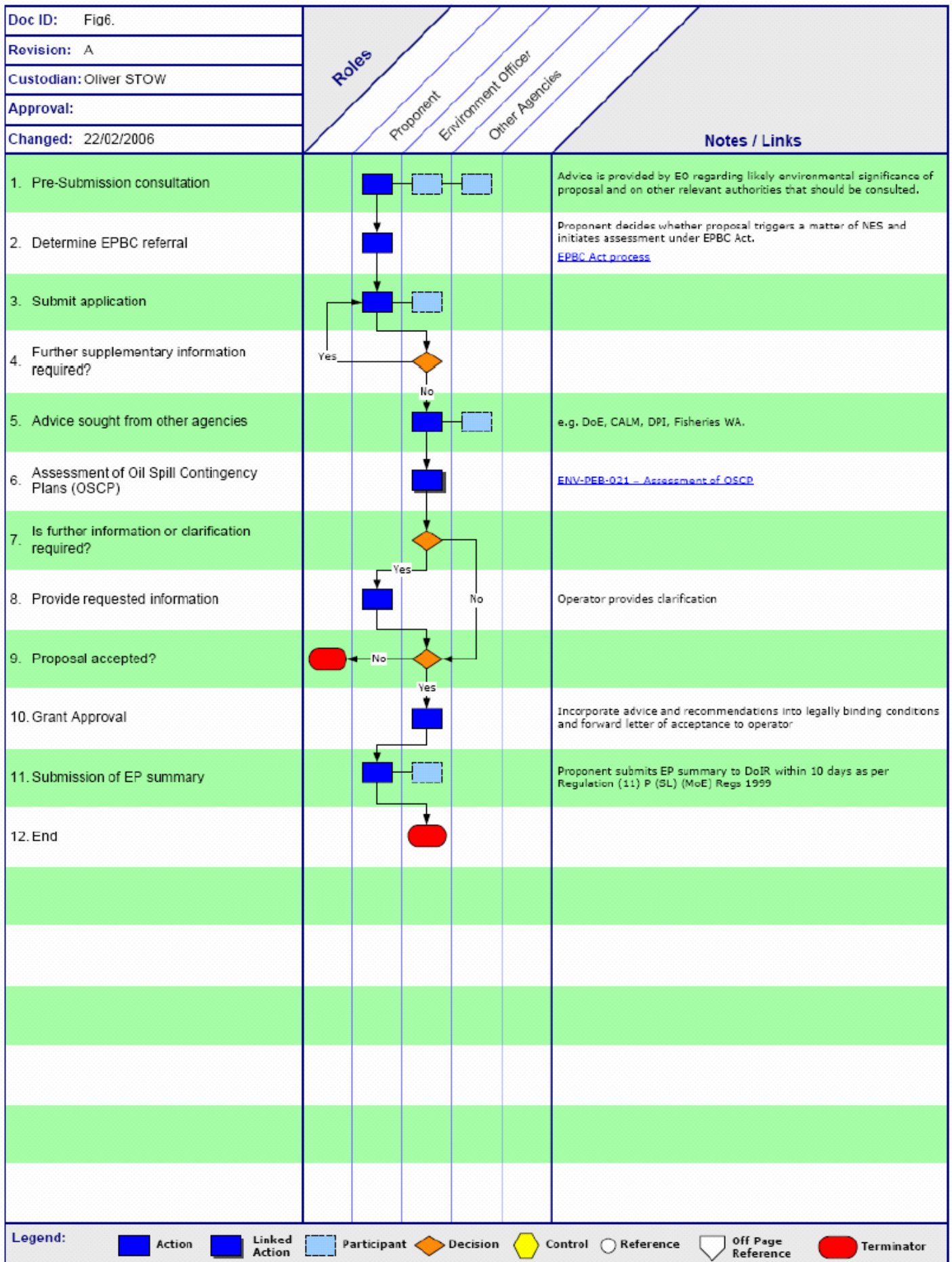
3.2.5 Setting of DoIR approval conditions









Proposals formally assessed by the Department of the Environment and Heritage will have ministerial conditions set upon them. The proposal will then be forwarded to the joint authority or designated authority, which may incorporate the ministerial conditions into conditions for final approval.


3.2.6 Proponent receives environmental acceptance and approval of the proposal

Upon acceptance of the environmental documentation by DoIR, the proponent is notified that the proposal has been accepted and ministerial conditions regulating the operation have been set. Proponents are reminded that environmental acceptance is only one component of the approval process under petroleum legislation and an activity can not commence until all other required approvals are in place.

Figure 6: Assessment Process for Proposals with areas of Commonwealth jurisdiction



Legend:  Action  Linked Action  Participant  Decision  Control  Reference  Off Page Reference  Terminator

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4 INTERACTION WITH OTHER AGENCIES

The Department of Industry and Resources interacts with numerous government agencies and industry groups to obtain advice and guidance on environmental management in Western Australia. The main government agencies and industry groups that DoIR interacts with are described below.

4.1 Australian Maritime Safety Authority

Australian Maritime Safety Authority (AMSA) is concerned with protecting the environment from ship-sourced pollution and maintaining the NATPLAN for oil spill contingency planning. DoIR may seek a comment from AMSA on Oil Spill Contingency Plans for proposals located in Commonwealth waters.

The Western Australian Department for Planning and Infrastructure on behalf of AMSA provides advice to assist DoIR in their assessment of Oil Spill Contingency Plan's. AMSA fulfils a greater role in proposals that are likely to result in ship-sourced pollution, for example, disposal of ballast water from shipping.

4.2 Australian Petroleum Production and Exploration Association

In 1978, the Australian Petroleum Production and Exploration Association (APPEA) developed a *Code of Environmental Practice* based on their key objectives of:

- Self-regulation;
- Ensuring industry activities are carried out to the highest standards; and
- Continued access to areas for exploration.

The Code is regularly revised and updated, most recently in 1996 (*APPEA, 1996*) to reflect advances in sound environmental management practice and developments in science, technology and community expectations.

The *Code of Environmental Practice* is intended to provide the upstream Australian petroleum industry with guidance on management practices and measures to protect the environment during onshore and offshore exploration, development and production. The APPEA Code provides a thorough checklist of effects and issues likely to be experienced by proponents and management options for these effects and issues. For example, Section 4 of the APPEA Code provides environmental guidelines for onshore petroleum activities; Section 5 provides guidelines for offshore activities, and Section 6 provides guidelines on waste and chemical management, and oil spill management.

The Code also provides comprehensive information on the development of Environmental Management Systems. The *Schedule of Onshore Petroleum Exploration and Production Requirements 1991* legislates for use of the *APPEA Code of Environmental Practice* as a default Environmental Management System if another system is not provided and accepted by DoIR. The offshore equivalent is the *P (SL) Acts Schedule; Specific Requirements as to Offshore Petroleum Exploration and Production 1995*. The *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999* provide similar management guidelines. More information on Environmental Management Systems is available in *Standards Australia (1996a, b)*.

4.3 Department of Environment and Conservation

4.3.1 Department of Environment and Conservation's Parks and Conservation Services Branch (previously known as the Department of Conservation and Land Management - CALM)

DEC's Parks and Conservation Services Branch has jurisdiction over:

- Onshore conservation reserves, State forest and other reserves vested in the Conservation Commission (ConCom, formerly known as the National Parks and Nature Conservation Authority or NPNC) or Forests Products Commission (FPC, formerly known as the Lands and Forest Commission or LFC);
- Offshore conservation reserves;
- The State's flora and fauna over all tenures (onshore and offshore) including declared rare flora, priority listed flora and specially protected fauna; and
- Threatened ecological communities.

These areas are regulated under the *Conservation and Land Management Act 1984* and the *Wildlife Conservation Act 1950*. During the development of a proposal, proponents are encouraged to liaise with DEC to determine the extent to which the proposal may impact upon areas or values within DEC jurisdiction. Upon submission of a proposal to DoIR that requires DEC (Parks and Conservation Services) input, copies of the proposal shall be sent to the relevant regional or district DEC office, and to the DEC Environmental Management Branch. This procedure applies where the proposed activity is in a reserve or other area with sensitive biological values as described below.

Onshore conservation reserves

Onshore conservation reserves are vested in the Conservation Commission, and State forests and timber reserves in the FPC, and are managed by DEC (Parks and Conservation Services). A position paper on petroleum exploration and production in national parks and nature reserves produced by the Conservation Commission is available from DEC. Proponents should consult with DEC during the pre-application phase regarding applicable conditions of proposed petroleum activities in these areas. This is specified for State forest, for example in the *Petroleum Act 1967 Schedule of Onshore Petroleum Exploration and Production Requirements 1991*, in Clause 707 (2).

Offshore conservation reserves

DEC's Parks and Conservation Services Branch is responsible for implementing the marine reserve policies and management plans developed by the Marine Parks and Reserves Authority (MPRA) in whom marine conservation reserves are vested.

The *Acts Amendment (Marine Reserves) Act 1997* amends the *Conservation and Land Management Act 1984* to give full legislative backing to commitments made in the New Horizons policy, specifically Sections 13A (3), 13B (9) and 13C (1, 2 and 7). The New Horizons policy restricts petroleum activities in some areas of offshore conservation reserves. The *Report of the Marine Parks and Reserves Selection Working Group in June 1994 (CALM, 1994)* proposed recommendations for marine reserves for Western Australia which are presently being processed.

Declared rare flora and priority listed flora (priority species)

DEC's Parks and Conservation Services Branch has management jurisdiction over declared rare flora and priority species, whether located inside or outside of a conservation reserve. Declared rare flora are protected under the *Wildlife Conservation Act 1950*, under which the destruction of individual plants belonging to a declared rare flora species is prohibited without written permission from the Minister for the Environment.

Priority species are not protected by legislation, however they can be considered as potential declared rare flora and still require careful attention. Priority species are listed due to their restricted distribution, the lack of information known about them or their restricted reservation status.

Flora surveys are required for the proposed well sites, seismic lines, campsites, pipeline easements, access roads, gravel source areas, and other areas of potential disturbance, to identify and quantify any declared rare flora or priority species present.

Guidelines for Flora and Fauna Surveys of Land Vested in the National Parks and Nature Conservation Authority is available from DEC's Parks and Conservation Services, Environmental Management Branch.

Weeds and dieback

DEC is concerned with the control of environmental weeds and Phytophthora dieback. DEC has developed guidelines on appropriate methods of dieback hygiene, which should be adopted for activities in areas of known or suspected Phytophthora dieback infection. These guidelines are available from DEC's Environmental Management Branch.

Threatened ecological communities

DEC (Parks and Conservation Services) is concerned with identifying and conserving threatened ecological communities. Information on threatened ecological communities can be obtained from the Threatened Species and Communities Unit of DEC.

Grant or renewal of State petroleum titles (Department of Industry and Resources and Department of Environment and Conservation protocol)

A protocol has been established between DoIR and DEC Parks and Conservation Services (formerly CALM) to facilitate processing of applications for petroleum titles when the proposed activities are located within the State's conservation estate or World Heritage Properties.

The procedures for such applications are:

- DoIR will provide DEC (and the Department of the Environment and Heritage in World Heritage Properties) with a plan showing the area of the application.
- DEC (and the Department of the Environment and Heritage if appropriate) will respond within four weeks by confirming the plan and providing comment;
- DoIR will use the comments of DEC (and the Department of the Environment and Heritage if appropriate) to brief the proponent concerning the area applied for and the possibility of revising the area if required; and
- The Minister for the Environment (and the Commonwealth Minister for the Environment where a World Heritage property is involved) will be advised by the Minister for Resources before an offer of a title or renewal is made. The advice will include a suggested press notice.
- Once the title is granted, DEC (and the Department of the Environment and Heritage if appropriate) will be advised.

4.3.2 Department of Environment and Conservation, Environmental Services Branch (previously Department of Environment)

As described in earlier sections, the Department of Environment and Conservation's Environmental Services Branch provides advice to DoIR and proponents in relation to proposals, assesses proposals against the requirements of the *Environmental Protection Act 1986*, and administers the *Environmental Protection Act 1986* on behalf of the EPA. DEC's Environmental Services Branch also issues works licences under Part V of the *Environmental Protection Act 1986*, and administers the enactment of Red Book areas and environmental protection policies.

Works Approval Licences

The Environmental Regulation Branch of the DEC, Environmental Services issues work approvals and licenses for petroleum activities to regulate emissions or discharges which are likely to cause pollution. The works approvals and licences will generally have monitoring and reporting requirements specified as conditions in the license.

Red Book areas

The Red Book recommendations were released between 1976 and 1984 by the EPA, dividing the State into 12 sections, called 'Systems'. Recommendations were made on areas to be classed as conservation reserves. The establishment of conservation reserves based on the Red Book recommendations are ongoing.

DEC's Parks and Conservation Services, Regional Management Plans formally supersede Red Book areas where such plans have been completed. DEC's Environmental Services is responsible for administering the Red Book recommendations on behalf of the EPA. Proponents are advised to liaise with the DEC (Environment Services) regarding possible effects of proposals on Red Book areas.

Environmental Protection Policies (EPP)

Under Part III, section 26 of the *EP Act 1986*, an Environmental Protection Policy (EPP) can be developed for:

- The protection of any part of the environment; or
- The prevention, control or abatement of pollution.

EPP's form part of the *EP Act 1986* and therefore must be complied with. EPP's may contain specific provisions relating to the protection and management of the nominated resource and its beneficial uses. Contravention of such provisions can be an offence. Information about specific EPP's that may be relevant to onshore and offshore proposals can be obtained from DEC's Environment Services, Natural Resources Management Division.

4.4 Department for Planning and Infrastructure

Apart from assessing Oil Spill Contingency Plans on the behalf of the State Committee, the Department for Planning and Infrastructure (DPI) also administers the Coastal Resource Atlas. Reference to the Coastal Resource Atlas will assist proponents to determine the proximity of their activities to environmentally sensitive areas, and assess the likely effects of their activities on these areas during development of the Environmental Management Plan. More information on the Coastal Resource Atlas is available from the Department for Planning and Infrastructure's, Marine Safety section of the website at (<http://www.dpi.wa.gov.au/imarine/703.asp>).

4.5 Department of the Environment and Heritage

The Department of the Environment and Heritage (DEH) provides advice to the Commonwealth Environment Minister on the assessment of proposals referred under the EPBC Act, and administers the Act on behalf of the Commonwealth Environment Minister.

DEH also issue permits that allow proponents to undertake an activity that may impact a matter(s) of National Environmental Significance. For example, a proposal that is likely to interfere with a cetacean (this may include seismic activity that occurs in known cetacean migratory routes) may require a permit.

World Heritage properties are vested in DEH. Under Article 2 of the World Heritage Convention, a natural heritage site is considered to be of outstanding universal value if it contains outstanding examples of evolutionary history, natural phenomena, formation or features, or significant natural habitat with threatened species.

The Shark Bay World Heritage Property was inscribed on the World Heritage list in 1991, on the basis of natural heritage values. At present, any proposal that appears likely to have a significant effect on the environment of the Shark Bay World Heritage Property will be referred by DoIR to the EPA under Section 38 of the *EP Act 1986*. Under arrangements with DEH the EPA then advises the Commonwealth (DEH) of their assessment decision.

DEH may also be referred to in relation to requirements under the National Pollutants Inventory (NPI). The NPI is a database designed to provide information on the types and volumes of substances being emitted to the air, sea and land. Petroleum operators are required to report their emissions annually. More information about the NPI in relation to petroleum operations is available at: <http://www.environment.gov.au/epg/npi/handbooks/index.html>.

4.6 Department of Fisheries and WA Fishing Industry Council (WAFIC)

There are no formal arrangements between DoIR and the Department of Fisheries or the WA Fishing Industry Council (WAFIC). However, these agencies are notified of all seismic, exploration and production drilling activities to obtain their advice before the proposal is approved. Where concerns are raised, the proponent may liaise with the relevant agency to resolve the issue. Guidelines for seismic surveys in Western Australian rock lobster fishing grounds, developed by DoIR in consultation with Department of Fisheries, WAFIC and APPEA, are available from (*DoIR, 1998b*).

4.7 Department of Water

The Department of Water manages Western Australia's water resources, including wetlands, rivers, estuaries, inlets and groundwater. For proposals to carry out onshore activities where there is the potential to impact upon inland water bodies or groundwater, DoIR would seek advice from Department of Water prior to approval of the proposal.

The Department of Water may make recommendations that may then become incorporated into the Ministerial conditions assigned to the proposal.

5 CONTACTS

Table 9: Relevant agencies with which proponents should liaise during development of petroleum proposals.

ORGANISATION	TITLE	BUSINESS PHONE NUMBER	FAX NUMBER
Department of Industry and Resources, Environment Division, Petroleum Branch	General Manager Petroleum	(08) 9222 3142	(08) 9222 3860
Department of Environment and Conservation, Environmental Management Branch (Como Office)	Environmental Officer	(08) 9334 0365	(08) 9334 0140
Department of Environment and Conservation, EPA Services Unit	Manager	(08) 9222 7085	(08) 9322 1598
Department of Planning and Infrastructure Marine Environmental Protection	Branch Coordinator Marine Environment Protection	(08) 9216 8803	(08) 9216 8982
Department of Industry, Tourism and Resources, Safety and Security Section, Resources Division	Manager	(02) 6213 7013	(02) 6213 9745

ORGANISATION	TITLE	BUSINESS PHONE NUMBER	FAX NUMBER
Department of Environment and Heritage, Environment Assessment Branch	Director Mining and Industrial Section	(02) 6274 1933	(02) 6274 1620
Department of Fisheries, Environmental Assessment Fish and Fisheries Habitat	Senior Environmental Officer	(08) 9482 7375	(08) 9482 7389
Western Australian Fisheries Industry Council	Assistant Executive Officer	(08) 9492 8829	(08) 9244 2934
Department of Consumer and Employment Protection (DOCEP)	General Enquiries	(08) 9282 0777	(08) 9282 0850
National Offshore Petroleum Safety Authority (NOPSA)	General Enquiries	(08) 6461 7000	(08) 6461 7037

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Appendix 1: Common acronyms used in this document

AMOSC	Australian Marine Oil Spill Centre
AMSA	Australian Marine Safety Authority (Commonwealth)
ANZECC	Australian and New Zealand Environment and Conservation Council
APIA	Australian Pipeline Industry Association
APPEA	Australian Petroleum Production and Exploration Association
ConCom WA	Conservation Commission (WA)
DEC	Department of Environment and Conservation (Previously DoE and CALM)
DoIR	Department of Industry and Resources (WA)
DPI	Department for Planning and Infrastructure (WA)
DITR	Department of Industry, Tourism and Resources (Commonwealth)
FPC	Forests Products Commission
IS	Implementation Strategy
DEH	Department of the Environment and Heritage (Commonwealth)
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
EP	Environment Plan
EPA	Environmental Protection Authority (WA)
EPBC	Environmental Protection and Biodiversity Conservation Act 1999
EPP	Environmental Protection Policy
IMO	International Maritime Organisation
LFC	Lands and Forest Commission
MPRA	Marine Parks and Reserves Authority
NES	National Environmental Significance N
PNCA	National Parks and Nature Conservation Authority
OCS	Offshore Constitutional Settlement
OSCP	Oil Spill Contingency Plan
SMPC	State Marine Pollution Committee
WAFIC	Western Australian Fisheries Industry Council
NPI	National Pollutants Inventory