



# Environmental Protection.

## 12 ENVIRONMENTAL PROTECTION A GUIDE FOR INVESTORS

### The States'/Territories' Roles in environmental protection.

In Australia, the State and Territory Governments own and administer mineral and petroleum rights over land, and seaward to three nautical miles from the sea baseline. In these areas, although the Australian Government has some responsibilities regarding environmental protection (see below), the State and Territories are the main authorities for environmental management of most mines within their respective jurisdictions.

Environmental management of mining and petroleum exploration and operation in Australia is based on the integration of all phases of resource planning and development, from assessment, through construction, operation and closure, to rehabilitation. Processes vary among the States and Territories, but there are some common features.

### The Environmental Management Process: Common features

The process provides a framework for identifying environmental impacts and determining ways to manage those impacts. The main steps are:

#### Proposal, Notice of Intention, Environment (Management) Plan or Initial Advice Statement

The proponent mining company describes the proposal, its duration; the infrastructure it will need; the proposed community consultation program; potential environmental impacts, their significance, and how those impacts are to be managed. In practice, informal discussions are held

with government agencies as the proposal is developed. The company proposal is often presented as a formal document of advice which the proponent uses to:

- › trigger the approvals process; and
- › inform the community about the project.

#### Government Assessment

A number of government agencies are normally involved in assessment of the proposal, including an environment protection agency or similar agency with responsibility for the environment impact assessment; a resources department which grants and administers mining tenements and petroleum titles; and local government, which grants local planning approvals (where needed) and provides services.

The relevant Government authority decides whether an environmental assessment is necessary (i.e. whether a project is environmentally significant) and, if so, the environmental issues to be addressed, and the required level of environmental impact assessment (EIA). In some States, the authority is an environment agency; in others, it is the resources department operating on advice from an environment agency.

Furthermore, in some instances, parallel environmental assessments for a proposal are conducted both by the environment agency and the resources department, in consultation. This occurs when legislative requirements overlap.

Most EIA processes have several levels of assessment, appropriate to the environmental significance and complexity of the proposed project. Where it is clear

from the initial advice that the company has adequately addressed environmental concerns and will be using adequate environmental management practices, the government authority may not require further assessment. This would often apply to mineral and petroleum exploration programs, some sampling trials and quarrying operations. In Queensland, codes of environmental compliance are used for low impact activities without any government assessment.

- › Where further assessment is required, the government agency scopes the environmental issues and priorities to be addressed, frequently with some community consultation. A public environmental report (PER), or similar document, is generally used for proposals which are likely to be of only local or regional public interest and where potential environmental impacts are few or easily managed. A PER provides details of the proposal including potential environmental impacts and proposed management techniques. A PER may typically be available for public comment from four to six weeks.

An environmental impact statement (EIS) or similar document is more comprehensive and detailed and may be required for major projects which attract wider public interest and/or deal with complex issues of environmental significance. Because these proposals have potentially significant impacts, they require detailed evaluation, need to be the subject of extensive community advice and review, and may need comprehensive environmental management programs. The public review period for an EIS is usually eight to twelve weeks.

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A public inquiry (or Commission of Inquiry) is an official process of investigation which can be used for very complex or controversial projects. It involves hearings and submissions by supporters and opponents. A public inquiry can help people understand complex scientific information, economic and social impacts, and can be a channel for independent advice to decision makers. Inquiries are particularly useful where different viewpoints are involved, where new technologies or developments have been proposed, or where a significant change in land use is proposed.

The proponent then responds to issues identified in the public review. Based on the proponent's response, a report and recommendations may be issued by the assessing authority.

### Government approvals

The government authority, or its Minister, will then issue an environmental approval for the project (or a decision may be made to not issue an approval if the government considers the project would have an unacceptable effect on the environment). The approval is often tied to an Environmental Management System, Environmental Management Plan or Mining Operations Plan. Several Plans of Management may be tied to the approved mine. These systems link the EIS and planning processes to mine operations and the mining title. They address such issues as tailings, water, stockpiles, noise and vegetation management; site rehabilitation, erosion issues; emissions controls; dust suppression; monitoring and reporting arrangements.

Australian mining and petroleum operations frequently voluntarily adopt the International Organisation for Standardisation's ISO 14001 or rarely the British Standards Institute's BS 7750 guidelines and specifications for environmental management systems.

### The Environmental Management Process: State Specific Assessment Processes

State and Territory Governments generally follow the above common approach. However, some State specific environmental assessment processes also comprise:

#### New South Wales

Industry and Investment NSW (formerly the Department of Primary Industries), maintains an Environmental Sustainability Branch (ESB) whose roles include environmental assessment of most new proposals, ensuring that environmental management systems are in place on mine sites to support effective progressive rehabilitation and ensuring that mined land is effectively rehabilitated and returned to a productive post mining land use.

Environmental and rehabilitation performance is enforced and regulated through title conditions. The principal process used is the requirement for all mines to prepare, and comply with, Mining Operations Plans (MOPs) and Annual Environmental Management Reports (AEMRs) in accordance with the Department's mining, rehabilitation and environmental management process. These require mines to actively consider environmental and rehabilitation outcomes and to provide management systems to integrate these outcomes with mine planning and production. They also provide a mechanism to integrate the reporting requirements of other agencies into a single document. This coordination enhances the ability of government agencies to effectively ensure that the economic benefits of mining are balanced with good environmental management.

ESB monitors the industry through inspections and audits of mine and exploration sites to ensure compliance with conditions and with the MOP/AEMR documents. These may be conducted by the ESB alone, or in conjunction and cooperation with other regulatory agencies.

#### Northern Territory

In the Northern Territory, the Department of Regional Development, Primary Industry, Fisheries and Resources is responsible for the regulation of mining and environmental management activities for the mining and exploration industry under the *Mining Management Act 2001*. Prior to the issue of approvals, development proposals are referred to the Environment, Heritage and Arts Division (EHA) within the Department of Natural Resources, Environment, the Arts and Sport (DNRETAS) for assessment under the *Environmental Assessment Act 1994*. Recommendations from the environmental assessment process are incorporated into the authorisation process under the *Mining Management Act 2001*.

#### Queensland

In Queensland, the Department of Environmental and Resource Management (DERM), formed in 2009, authorises environmentally relevant activities for mining, mineral exploration and petroleum exploration and production. Mining, petroleum and exploration projects considered to have a low risk of serious environmental harm will need to comply with standard conditions specified in a Code of Environmental Compliance. For all other mining, petroleum and exploration projects, DERM must decide conditions for an environmental authority before the Minister for Mines and Energy or Governor in Council grants the tenement. The environmental authority under the *Environmental Protection Act 1994* does not take effect until the mining or petroleum tenement is granted under the *Mineral Resources Act 1989* or the *Petroleum and Gas (Production and Safety) Act 2004*.

### South Australia

Protection of the environment in relation to resource industry activities is primarily ensured by the Minerals and Energy Division of the Department of Primary Industries and Resources (PIRSA) through its roles in assessment, permitting, environmental regulation and monitoring. A Memorandum of Understanding have been developed between PIRSA and the Environment Protection Authority and the South Australian Department of Environment and Heritage, which aims to provide a one-stop-shop for industry, with PIRSA acting as the single primary point of contact and is therefore the lead agency for resource developments.

### Tasmania

Mineral Resources Tasmania issues exploration licences and mining leases. Conditions and bonds are set in consultation with land managers. Exploration programs are approved, reviewed and monitored on technical performance and on environmental impact. Mining development is assessed by the relevant municipal council and the Department of Primary Industry, Parks, Water and Environment following submission of an environmental management plan and public comment. Council permits must incorporate Department of Primary Industry, Water and Environment conditions.

### Victoria

The Department of Primary Industries (DPI), Earth Resources Division is the key agency responsible for minerals, petroleum and stone extraction. However, a range of other agencies are also involved in relation to the granting of planning approvals and works approvals.

When a mining project is first proposed, an initial assessment of the level of investigation by the proponent is required. Small projects with limited potential to impact on the community or the environment normally require a planning permit from the relevant local council. For larger projects in more sensitive areas, a more comprehensive Environment Effects Statement process may be required

under the *Environmental Effects Act 1978* administered by the Department of Planning and Community Development. In addition to obtaining planning approval, a work authority must be granted under the *Mineral Resources (Sustainable Development) Act 1990* before mining works can commence. The work authority incorporates an approved work plan, which includes plans to manage environmental and community impacts, and other relevant consents and approvals, such as for cultural heritage management, native vegetation, Crown land access and Environment Protection Authority works approvals.

Once a mine has been approved, a project-specific Environment Review Committee (ERC) may be established for significant mining activities. ERCs most commonly include representatives of the site, community, interest groups, local council, DPI and other relevant government agencies. ERCs review environmental performance, but may also provide an opportunity for mining companies to seek feedback on their community engagement performance.

### Western Australia

If a mining or petroleum proposal has a potential to have a significant impact on the environment, it has to be referred to the WA Environmental Protection Authority (EPA) under the *WA Environmental Protection Act 1986* to determine if a formal environmental impact assessment is required.

Projects which have the potential of triggering matters of National Environmental Significance are referred to the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA) for their assessment.

In addition, the Department of Mines and Petroleum (DMP) undertakes an environmental assessment for most resource proposals. Relevant environmental approvals for resource activities are required under the *WA Mining Act 1978*, *Petroleum and Geothermal Energy Resources Act 1967*, *Petroleum (Submerged Lands) Act 1982* and *Petroleum Pipelines Act 1969*.

DMP also acts as a designated authority for the Commonwealth, in assessing petroleum

proposals under the Commonwealth Offshore Petroleum and *Greenhouse Gas Storage Act 2006*. Environmental aspects for proposals in Commonwealth waters off WA are regulated under the *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999*.

However, if a mining or petroleum proposal has particular environmental significance, DMP refers it to the WA Environmental Protection Authority (EPA) (when required under the relevant memorandum of understanding) for assessment under the *WA Environmental Protection Act 1986*.

Furthermore, environmental advice and regulatory services for resource projects may also be provided by the Department of Environment and Conservation (DEC) and the Department of Water (DoW) as required.

### The Australian Government's role in environmental protection

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), any action that is likely to have a significant impact on a nationally protected matter needs to be considered for environmental assessment and approval by the Australian Government.

The eight matters of national environmental significance protected by the EPBC Act are:

- › the Commonwealth marine environment;
- › World Heritage properties;
- › National Heritage places;
- › Ramsar wetlands of international importance;
- › nationally listed threatened species and ecological communities;
- › migratory species;
- › nuclear actions; and
- › the Great Barrier Reef Marine Park

The EPBC Act also regulates the environmental impact assessment and approval of:

- › actions by Australian Government departments and agencies that are likely to have a significant impact on the environment anywhere;
- › actions taken in a Commonwealth area

that are likely to have a significant impact on the environment generally; and

- › actions taken outside a Commonwealth area that are likely to have a significant impact on the environment of a Commonwealth area.

Activities invoking the requirements of the EPBC Act must not be carried out without approval of the Australian Government environment minister. However, in certain circumstances assessments and approvals under the EPBC Act may not be required—see the text on bilateral agreements and declarations below.

The EPBC Act places the onus for referring proposals on the person proposing to take the action, rather than the Australian Government. Proponents can determine early in the planning stages whether a project or activity will need assessment under the legislation. If the proponent is in any doubt, the proposed action may be referred to the Australian Government environment minister, who must make a binding decision within 20 business days on whether further assessment is needed.

There are three stages for a project proponent to obtain an approval:

- › **referral** – proponents may refer their development proposals to the Australian Government environment minister who has 20 business days to decide whether the proposed action requires approval under the legislation;
  - if the action does not require approval the proponent can proceed without exposure to legal liability, remembering that State, Territory and local government authorisations may be needed for the action;
  - if the action does require approval, the application then proceeds to the second stage, assessment;
- › **assessment** – the Australian Government environment minister may use several assessment approaches, from assessment on preliminary documentation to the preparation of an environmental impact statement or the conduct of a public inquiry. State and Territory government assessment processes can also be accredited on a case-by-case basis; and

- › **approval** – is either granted, granted with conditions, or denied.

For the purposes of the EPBC Act, environmental assessment focuses on the defined matters of national environmental significance and the whole environment if the proposed development involves impacts on Commonwealth land or the action is being taken by a Australian Government agency. If State/Territory authorisations are also required, the relevant State/Territory will assess the matters under its own legislation.

For example, where a proposal is likely to have a significant impact on a particular threatened species, the assessment required under the EPBC Act only needs to consider the impact of the proposal on that threatened species, and the proposed measures to mitigate or avoid that impact.

The Australian Government may accredit State and Territory environmental assessment processes through bilateral agreements, which need to satisfy the requirements of the Act. There are currently bilateral agreements in place with all seven jurisdictions. The Act also permits, in particular circumstances, bilateral agreements for State and Territory approvals, although there is currently only one in effect. If an action is assessed under a bilateral agreement with a State or Territory government, it does not need to be assessed under the EPBC Act—the State/Territory assessment report is provided to the Australian Government environment minister for an approval decision.

The Department of the Environment, Water, Heritage and the Arts' website at [www.environment.gov.au](http://www.environment.gov.au) provides policy advice on the referrals, assessment and approvals process, and information for industry to progress projects through the environmental system openly and transparently. The public may also monitor and comment at appropriate stages in the approval process.

The EPBC Act protected matters search tool assists in searching for matters of national environmental significance in an area an action is proposed, at [www.environment.gov.au/erin/ert/epbc/](http://www.environment.gov.au/erin/ert/epbc/).

The EPBC Act *policy statement 1.1* – Significant impact guidelines provides guidance in determining whether an action is likely to have a significant impact on a matter of national environmental significance.

The EPBC Act *policy statement 1.2* – Significant impact guidelines provide guidance on determining whether actions involving Commonwealth land or taken by Australian Government agencies are likely to have a significant impact on the environment. These policy statements are available on the website: [www.environment.gov.au/epbc/policy/index.html](http://www.environment.gov.au/epbc/policy/index.html).

### Environmental Assessment and Approvals for Offshore Petroleum Projects

Australia has jurisdiction over more than 12 million square kilometres of ocean waters – an area about one and a half times the size of the Australian Continent. These waters are rich in natural resources, including proven oil and gas reserves. The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGSA) provides for:

- › the Australian Government Minister for Industry, Tourism and Resources to administer petroleum exploration and development activities in Australia's offshore areas (beyond the first three nautical miles of territorial sea); and
- › the relevant State/Territory Minister for Mines (or equivalent), as the "Designated Authority", is responsible for the day to day administration.

These activities are subject to the assessment and approvals conditions of the EPBC Act (the Commonwealth marine environment is considered a matter of NES) as well as the environmental conditions specified in the OPGGSA, and associated Regulations and Directions.

The OPGGSA contains a broad requirement for title holders to operate in accordance with "good oilfield practice". Specific environmental provisions relating to work practices essentially require operators to control and prevent the escape of wastes and petroleum. The Act also requires activities to be carried out in a manner

that does not interfere with other rights, including the conservation of the resources of the sea and seabed. Before any drilling operation begins, companies must have an approved oil spill contingency plan.

In some cases, special conditions are applied to an exploration permit area. These conditions can be tailored to suit the unique environment of an area or the multiple marine uses within the area, and take account of sensitive environments in the adjacent State or Northern Territory.

The holder of an exploration permit, retention lease, production licence or pipeline licence must maintain, as directed by the Designated Authority from time to time, insurance against expenses or liabilities arising in connection with carrying out work on the lease.

*The Petroleum (Submerged Lands) (Management of Environment) Regulations 1999* are an objective-based, co-regulatory regime for managing the environmental performance of the Australian offshore petroleum industry. Under the regulations, petroleum operators are required to prepare and implement environment plans for each specific activity, which will identify environmental risks and effects, establish specific performance standards, including measurement criteria to assess performance against those standards, and incorporate an implementation strategy to achieve those standards. Comprehensive guidelines (under continuous review for best practice) aim to assist operators and regulators implement the proposed arrangements. The regulations encourage petroleum operators to employ innovative and efficient technological and environmental management solutions, tailored to their specific circumstances, to achieve superior environmental outcomes while also reducing compliance costs.

As petroleum activities that are subject to both the OPGSA and EPBC Act assessment processes normally involve the same

measures for environment protection, the Australian Government provides for examination of the interaction of the two processes. The main avenue is currently through the Standing Committee on Environmental Approval Processes for Offshore Acreage comprised of officers from the Department of Industry, Tourism and Resources and the Department of the Environment and Heritage. The aim of the Standing Committee is to provide certainty of process and outcomes for environmental approvals processes by addressing issues that are identified as relevant to both regulatory frameworks.

**State specific example:**



**Australian Government**

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