

# **Petroleum (Submerged Lands) (Management of Environment) Regulations 1999 1999 No. 228**

## **EXPLANATORY STATEMENT**

### **STATUTORY RULES 1999 No. 228**

Issued by the authority of the Minister for Industry, Science and Resources

*Petroleum (Submerged Lands) Act 1967*

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

The Commonwealth Government exercises jurisdiction over the offshore petroleum exploration and production industry operating more than 3 nautical miles from the Territorial Sea Baseline through the *Petroleum (Submerged Lands) Act 1967* [P(SL)A]. Section 157 provides that the Governor-General may make regulations for the purposes of the P(SL)A.

Day-to-day regulation of industry activities is undertaken by each State and the Northern Territory as the Designated Authority (DA) for adjacent waters. Environmental performance was previously addressed primarily through certain standing Directions issued in accordance with section 101 of the P(SL)A. The P(SL)A is also supported by regulations and directions covering matters such as safety, diving and petroleum resource management.

The standing Directions made under the P(SL)A were legislative in nature, requiring the offshore petroleum industry's compliance, but were not subject to parliamentary scrutiny. It is Government policy that all subordinate legislation be subject to parliamentary scrutiny. Accordingly, the current arrangements could not be continued indefinitely.

The Directions were also prescriptive in nature, and did not encourage continuous improvement or industry to adopt best practice environmental management practices and technologies to ensure that high standards of environmental performance are maintained.

The regulations replace the existing relevant standing directions. They provide an objective based regime for the management of environmental performance for Australian offshore petroleum exploration and production activities in areas of Commonwealth jurisdiction. Key objectives are:

- encouraging industry to continuously improve its environmental performance;
- to adopt best practice to achieve agreed environment protection standards in industry operations; and
- to ensure operations are carried out in a way that is consistent with the principles of ecologically sustainable development.

A key feature of the regulations is the requirement that an operator submit an environment plan before commencing any petroleum activity. Part 2 of the regulations sets out the various requirements, procedures, and features of an environment plan. An accepted environment plan will

establish the legally binding environment management conditions that must be met by the operator

of an offshore petroleum activity, and will include:

- a description of the activity;
- a description of the environmental setting in which the activity will take place;
- an assessment of the environmental risks and effects of the activity;
- proposed environmental performance standards and criteria for determining whether the standards have been met; and
- an implementation strategy for ensuring the standards are met.

The implementation strategy will identify specific systems, practices and procedures to be used to ensure that the environmental effects and risks of the activity are kept as low as reasonably practicable, and that the environment performance objectives and standards in the environment plan are met. The implementation strategy will also: establish clear chains of command; provide for the monitoring, auditing and review of environmental performance, including the monitoring of emissions and discharges; and provide for the maintenance of an up-to-date emergency response manual, including an oil spill contingency plan.

An environment plan is a unique document aimed at the specific operating environment in which an operation will take place. The DA will assess the environment plan based on that environment. As a result, a particular environment plan may be acceptable for a specific operation in a specific area, but unacceptable in another. An environment plan can be submitted for a particular stage of an activity, but no further operation will be permitted until covered by a relevant environment plan.

Part 2 of the regulations also sets out the conditions for revision of an environment plan. The operator must submit a proposed revision of the environment plan to the DA before the commencement of any new activity, or any significant modification, change or new stage of an existing activity, or upon a significant increase in, or the occurrence of any significant new, environmental effect or risk not provided for in the current environment plan. An environment plan must also be revised every 5 years, regardless of whether or not it has been modified in the previous period. Refusal to revise an environment plan pursuant to these regulations, or upon request by the DA, can result in the revocation of acceptance of an existing environment plan, effectively requiring the operator to cease operations.

Part 3 of the regulations outlines the requirements in relation to reporting incidents, maintenance of records and access to records.

Part 4 of the regulations introduces a series of miscellaneous administrative provisions. In particular, it prescribes the maximum concentration of petroleum in any produced formation water discharged into the sea. The regulation takes into account the environmental setting of a particular operation, and will in effect require the operator to show reason why the discharges outlined in an environment plan should not be lower than the maximum amounts specified in the regulations.

These regulations have been developed by the Department of Industry, Science and Resources in conjunction with a working group consisting of industry, Commonwealth and State and Northern Territory governments and environment representatives. The working group supports the objective based regulations as proposed.

A Regulation Impact Statement can be found at Attachment A.

## **Attachment A**

### **REGULATION IMPACT STATEMENT**

#### **Petroleum (Submerged Lands) (Management of Environment) Regulations 1999**

##### **Problem**

The Australian offshore Petroleum industry has a good environmental record as was recognised in the 1995 State of the Marine Environment Report. However, due to the highly visible environmental effects of potential major petroleum exploration and production industry accidents, of which there have been few worldwide and none in Australia to date, there is a strong community perception that the Government has a responsibility in areas of its jurisdiction to protect the natural, cultural, social and economic aspects of the environment from possible adverse impacts from the activities of the industry.

In accordance with the Offshore Constitutional Settlement, the Commonwealth Government has jurisdiction over the offshore petroleum exploration and production industry operating more than 3 nautical miles from the Territorial Sea Baseline (the low water mark or straight lines closing certain bays or fringing islands) through the *Petroleum (Submerged Lands) Act 1967* (P(SL)A). Mirror State and Northern Territory legislation operates in the Territorial Sea less than 3 nautical miles from the Territorial Sea Baseline.

The State and the Northern Territory governments are involved in the administration of the P(SL)A through membership of the Joint Authority and as the Designated Authority for the area adjacent to the relevant State or the Northern Territory. The Joint Authority is responsible for major decisions and the Designated Authority is responsible for the day to day regulation of industry activities.

Environmental performance is addressed under the P(SL)A, currently primarily through certain standing Directions made by the Joint Authorities established by the P(SL)A and issued in accordance with section 101 of the P(SL)A. These standing Directions are collated in the Schedule of Specific Requirements as to Offshore Petroleum Exploration and Production in Waters under Commonwealth Jurisdiction (the Directions).

The standing Directions made under the P(SL)A are legislative in nature, ie, they establish law that the offshore petroleum industry is required to comply with and are therefore considered to be legislative instruments. It is Government policy that all subordinate legislative instruments are to be subject to parliamentary scrutiny. The Directions are not subject to Parliamentary scrutiny. Consequently, reliance on the Directions to regulate environmental performance of the offshore petroleum industry could not be continued indefinitely.

The Directions are also prescriptive in nature, and do not encourage continuous improvement or industry to adopt best practice environmental management practices and technologies to ensure ongoing high standards of environmental performance.

##### **Objectives**

The main objectives are to ensure that offshore petroleum exploration and development operations are performed in a way that is consistent with the principles of ecologically sustainable development, reduces environmental risks and effects to as low as reasonably practicable and is acceptable.

More direct objects are to encourage continuous improvements in environmental performance and to permit industry to adopt environmental management practices and technologies best suited to individual company circumstances, activities and locations.

## Options

Three options for ensuring good environmental performance in the offshore petroleum industry were identified; industry self regulation, prescriptive regulation and objective-based regulations.

As noted above, it would not be consistent with Government policy to continue regulating the environmental performance of the offshore petroleum industry through the standing Directions, ie, this potential option is not available. However, conversion of the substance of the Directions to regulations is an option and would be equivalent to introducing prescriptive regulations as discussed below.

### Industry Self Regulation (no legislative regulation)

Under self regulation, it would be left to industry to set the environmental performance standards it considered acceptable to the community. Many of the potential natural, cultural, social and economic environmental effects of offshore petroleum exploration and development operations would occur external to the operations. There would be significant community concern that these externalities would not be adequately accounted for by the industry in setting the performance standards.

There would be no framework to guide the industry on what is expected of it, particularly in terms of what it should take into account in engaging the community and arriving at acceptable environmental performance standards. Industry would be responsible for developing its own processes for establishing appropriate operating standards. Equally, the community would have no framework for being satisfied that industry proposals are subject to appropriate environmental scrutiny. Achieving acceptable standards and compliance would be through community reaction to operations, and this is likely to lead to uncertainty for all parties and a high potential for disputes between the industry and community groups.

This option is not supported by the environment agencies or other community groups involved in the development of the regulations as it is seen as not providing adequate oversight of industry activities, thus abrogating the government's responsibility to protect the environment on behalf of all Australians.

Equally, industry does not support this option because of the inherent uncertainty and potential for costly delays and interruption of operations through the actions of groups opposed to the industry or particular developments,

Additionally, in the absence of specific Commonwealth legislation, some aspects of adjacent State/Northern Territory environmental legislation would be applicable because of the provisions of Section 9 of the P(SL)A. This would lead to different requirements in different adjacent areas. Such differences are undesirable and would increase industry costs.

No further analysis of this option has been undertaken.

### Prescriptive Regulations

This option would provide a similar framework to that currently operating, with the exception that the regulations would be subject to parliamentary scrutiny. This option would continue a regime whereby prescribed performance standards, management practices and technology options would be set out in regulations covering all aspects of offshore petroleum operations. Industry would be required to strictly follow the prescriptive standards, practices and technology options.

### Objective-Based Regulation

Consistent with the principles of ecologically sustainable development, this option would establish an objective-based framework in which operators would be required to submit a proposal setting out how they proposed to undertake an activity. The primary objective would be to ensure that offshore petroleum exploration and development operations are performed in a way that reduces environmental risks and effects to as low as reasonably practicable and is acceptable.

More direct objects would be to encourage continuous improvements in environmental performance and to permit industry to adopt environmental management practices and technologies best suited to individual company circumstances, activities and locations.

Operators would be required to submit a proposal, and Environment Plan, that included a description of the environment, an assessment of environmental risks and effects, set out the proposed environmental performance standards for the activity and the criteria to be used to measure whether the standards have been met. The regulator would assess the submission for relevance, completeness and whether the risks and effects have been reduced to as low as reasonably practical and are acceptable. Provisions for appropriate community consultation in the development and assessment of proposals would be included.

Individual operators will be required to revise their environment plan every five years following initial acceptance of a plan.

Through objective-based regulations, the performance standards will be tailored to the actual operating environment. It is likely that different operators will propose, and have accepted, different practices and systems tailored to individual circumstances, activities and locations to achieve the same objective. It is also likely that there will be differences between the agreed operational standards applying in different regions on, for example, seasonal or local environmental considerations.

The Environment Plan, when accepted, becomes the legally binding agreement between Government regulators and the operator, setting out the environmental performance objective, standards and criteria against which the operator will be assessed.

Operators will be required to provide at least annual compliance reports including reports on audits of performance and management systems. The DA will have the power to undertake, or direct the undertaking of, audits of performance or systems where they are not satisfied with the operator's reports.

If an operator is not complying with the agreed environment plan, the DA can withdraw acceptance of the environment plan, and operations for that activity must cease.

Comprehensive non-mandatory guidelines prepared concurrently with the regulations will be available to assist industry in complying with the regulations and regulators in their administration.

The guidelines will outline the types of matters that should be addressed or considered in preparing an Environment Plan for different types of offshore petroleum operations and include a list of prompt questions for assessors of submitted Plans. The guidelines will not include "deemed to comply" provisions.

## **Impact analysis**

All options analysed will impact directly on the offshore petroleum industry, government regulators and community interest groups. Industry would be required to comply with a regulatory regime regulators would be required to ensure compliance and community interest groups would be involved to a greater or lesser extent in consultation during the approvals

process and at times in assessing performance or impact of particular operations. Petroleum consumers are not likely to be affected.

### Prescriptive Regulations

Prescriptive regulations have the benefit, if appropriately drafted and relevant, of providing the clear standards and practises that industry is required to meet and adopt and against which regulators can determine compliance. However, they do not encourage continuous improvement in performance and the adoption of appropriate new technologies. In essence they place the onus of proving the acceptability of environmental performance on the regulator rather than the industry.

Prescriptive regulations are generally written around existing technology and management practices. They specify the technology or management system to be used, for example, a particular grade of steel might be specified for pipes. While appropriate at the time of writing the regulations, this would in this case prevent the use of a new, better performing, perhaps lower cost, steel until the regulations were changed. Noting the long lifetime of many offshore petroleum developments, an inability to use the best technology because of prescriptive regulations could result in higher than optimal risks to the environment over an extended period.

In an industry with rapidly developing technologies, prescriptive regulations often lead to higher operational costs because of the inherent delay in adoption of the technology while awaiting changes to the regulations to meet changing circumstances. Industry has indicated it would prefer a regulatory regime that enables it to adopt better, more cost effective environmental practices and technologies in a timely manner.

Community groups consulted during the development of the regulations have indicated that they recognise the potential for the regulations to lag behind technological and other developments, resulting in less than optimal environmental performance when better technology or practices can not be adopted until the regulations are changed.

Prescriptive regulations impose a burden on governments because they must be constantly monitored to ensure that changing practices, standards and technologies are reflected. Such changes require that regulations be updated periodically which consumes significant resources including preparation and tabling of amendments in the Parliament. Resources from the Commonwealth and State and Northern Territory governments and industry would be needed for the drafting, consultation and implementation processes.

Compliance costs for industry would include costs in assessing the environmental setting where operations are to take place and developing appropriate development concepts, management strategies and practices and reporting arrangements consistent with the regulations. Assessment of the environmental setting would include assessment of environmental risks and effects to ensure the selected management strategies and practices and compliance reporting arrangements provide for compliance with the P(R)A and meet other Commonwealth environmental legislation including the *Environment Protection (Impact of Proposals) Act 1974*. The costs would be similar to the industry costs to comply with the current regime where similar actions are required of industry.

### Objective-Based Regulation

Government, industry and environmental groups support objective-based regulation because it provides a legislative framework with the following benefits:

- \* provides for assessment of all environmental risks and effects on a project specific basis;
- \* Minimises environmental risks and effects for approved proposals;

- \* encourages adoption of best practice environmental management systems and continuous improvement in all aspects of a company's environmental performance;
- \* reduces industry costs by allowing timely adoption of improved practices and technologies;
- \* reduces, government costs by eliminating the need for changes to regulations to meet rapidly changing industry practices and technology;
- \* provides transparent and accountable approval and compliance processes; and
- \* is consistent with the principles of ecologically sustainable development

Objective-based regulations encourage the use of best practices and technologies as they become available which should result in improved environmental outcomes. For example, in the steel for pipes example above, the use of a better performing steel would reduce the risks to the environment at possibly a lower cost to industry. This is an important benefit noting that offshore projects often continue in operation for decades and the high cost of changing technology after operations commence, if the best available options can not be adopted from the start.

Objective-based regulations compared to prescriptive regulations would remove most of the costs to Government in maintaining the regulations up to date. However, some of this cost saving might be offset by the increased need to assess industry proposals included in Environment Plans for acceptability. On balance it is expected there should be a net decrease in Government costs.

Industry compliance costs would be similar to those incurred through prescriptive regulation as described above. Similar industry actions are required for ensuring compliance. However, there are significant potential cost savings for industry by being able to tailor technologies, practices and systems to particular circumstances including the environmental setting.

#### Summary of outcomes for each option

Self regulation would not provide a framework to guide the industry on what is expected of it, particularly in terms of matters to take into account when engaging the community and arriving at acceptable environmental performance standards. Equally, the community would have no framework for being satisfied that industry proposals are subject to appropriate environmental scrutiny. This would not provide any certainty and would be likely to lead to increased cost to all parties through ongoing disagreements about acceptability of proposals, with inherent disputes and delays.

Prescriptive Regulation would not be as effective as the proposed objective-based system. The responsiveness to improvements in environmental management practices and technologies would lag behind best practice, as the regulations would need to be amended through the legislative process, leading to less than optimal environmental outcomes. Prescriptive regulations would involve additional costs to all parties, through the resources that would have to be committed to the drafting, consultation and implementation of the revised regulations.

Objective-based regulation is the preferred option. It provides a framework Within which the government, industry and the community can work together to ensure the environmental risks and effects from exploiting Australia's petroleum resources are as low as reasonably practical and acceptable and encourages continuous improvement in industry environmental performance.

#### **Consultation**

Potentially affected/interested parties were involved in the development of the objective-based regulations through:

\* a tripartite working group comprising government regulators, industry and community environmental interests which met regularly to draft the proposed regulations and accompanying guidelines- and

\* a correspondence working group, encompassing a wider network of government and community interests, which was invited to provide written comment on working papers and the draft regulations.

The Australian Petroleum Production and Exploration Association (APPEA) and five operating companies represented industry on the working group. They support the regulations as proposed.

The resource departments of South Australia, Victoria, the Northern Territory and Western Australia were represented on the working group. The resource departments undertake the day to day administration activities of the Designated Authority. Australian offshore petroleum exploration and production activity is concentrated off these states and the Northern Territory. The other states were included in the correspondence group. All support the proposed objective-based regulations.

Environment Australia and the National Environment Consultative Forum were represented on the working group. They support the objective-based regulations as proposed.

### **Conclusion and recommended option**

Industry self regulation is unacceptable to industry and the community. It does not provide certainty of process and would likely lead to disputes and delays with consequent increased costs to all parties.

Prescriptive regulation is not supported because of the likely less-than-optimal environmental outcomes and increased industry cost resulting from delays in adopting best environmental practices and technologies that would not be allowed until the regulations were changed. There would also be increased costs to all parties to meet the ongoing need to change the regulations through a consultative process.

Objective-based regulation is the preferred option because it is consistent with the principles of ecologically sustainable development, encourages continuous improvement in environmental performance. and allows improved industry efficiency through the timely adoption of new practices and technology. It should ensure ongoing good environmental performance in the Australian offshore petroleum exploration and production industry.

### **Implementation & review**

The regulations will be made in accordance with Section 157 of the P(SL)A. They will come into force 1 October 1999 with a two-year transitional period for existing, approved projects. The standing Directions will continue to apply for existing projects until those projects have complied with the new regulations. The Directions will then be revoked for each project as it complies with the new regulations.

The proposed regulations will supersede directions currently issued under the P(SL)A and include requirements for compliance with the following Acts where relevant:

\* *Environmental Protection (Impact of Proposals) Act 1974;*



- \* *Environmental Protection (Sea Dumping) Act 1981;*
- \* *Australian Heritage Commission Act 1975;*
- \* *National Parks and Wildlife Conservation Act 1975;*
- \* *Historic Shipwrecks Act 1976,*
- \* *Whale Protection Act 1980;*
- \* *Protection of the Sea (Prevention of Pollution from Ships) Act 1983;*
- \* *World Heritage Properties Conservation Act 1983;* and
- \* *Endangered Species Protection Act 1992.*

The regulations will be administered through the joint Commonwealth and State/Northern Territory arrangements as established by the Offshore Constitutional Settlement.

Comprehensive non-mandatory guidelines prepared concurrently with the regulations will be available to assist industry in complying with the regulations and regulators in their administration.

It is proposed to review the Guidelines, in light of experience, 18 to 24 months after the regulations come into force.

The regulations will be kept under review by the Australian and New Zealand Minerals and Energy Council's (ANZMEC) sub-committee on Petroleum and the subject of a comprehensive review five years after they come into force. The comprehensive review will include full consultation with relevant bodies. The effectiveness of the regime in ensuring ongoing, good environmental performance in the Australian offshore petroleum exploration and development industry will be assessed using information provided in the environmental reports required from operators by the objective-based regulatory system.

Industry's options for meeting agreed environmental performance standards would be more flexible than at present. Individual operators will be free to adopt environmental management practices and technologies best suited to individual company circumstances, activities and locations, subject to demonstrating standards are likely to be met. The present prescriptive requirements can delay the adoption of better practices and technologies with consequent increased industry costs and less-than-optimal environmental outcomes.

Small business is generally not involved in the exploration and production of petroleum. However, the new regulations may provide them with some additional opportunities for the supply of goods and services to the offshore petroleum industry where they can assist in the adoption of new practices and technologies.