



Government of **Western Australia**  
Department of **Mines and Petroleum**

# Environmental Regulatory Strategy

November 2014

# 1 Introduction

## 1.1 Environmental Regulation by the Department of Mines and Petroleum

The Department of Mines and Petroleum (DMP) carries prime responsibility for regulating the resources industry in Western Australia. DMP undertakes its environmental regulatory role within a State and Federal regulatory framework.

DMP's key roles are to:

- undertake environmental impact assessment and compliance monitoring under the *Mining Act 1978* (Mining Act); *Petroleum and Geothermal Energy Resources Act 1967*; *Petroleum (Submerged Lands) Act 1982*; and the *Petroleum Pipelines Act 1969* and subsidiary legislation;
- inspect, investigate and enforce compliance with environmental impact assessment approvals; and
- provide information on its regulatory services and provide advice to other government agencies.

It is recognised that proposals which may have environmentally significant<sup>1</sup> impacts are subject to Part IV of the *Environmental Protection Act 1986* (EP Act). DMP is also responsible for native vegetation clearing permits for mining and petroleum activities, under delegation of the EP Act.

## 1.2 Regulatory reform

DMP continues to focus on ensuring that resources development in Western Australia occurs in a manner that is safe, environmentally acceptable, and achieves community confidence.

Over the last four years, the Western Australian Government has implemented substantial improvements in reforming approval processes. Consistent with this reform strategy, in May 2012 DMP announced the implementation of its Reforming Environmental Regulation (RER) program to fully integrate a risk and outcomes based approach to implement the principles of best practice environmental regulation into its regulatory functions. The petroleum industry has been regulated under risk-based legislation since 2000, and the necessary legislative framework for mining is currently under development.

Recommendations from a Ministerial Advisory Panel review of this program included regulatory aspects such as:

- Establish clear and appropriate environmental outcomes
- Establish clear and enforceable environmental obligations in an appropriate legislative framework
- Implement a full risk-based assessment and compliance methodology for environmental regulation
- Revise performance indicators in line with risk-based regulation.

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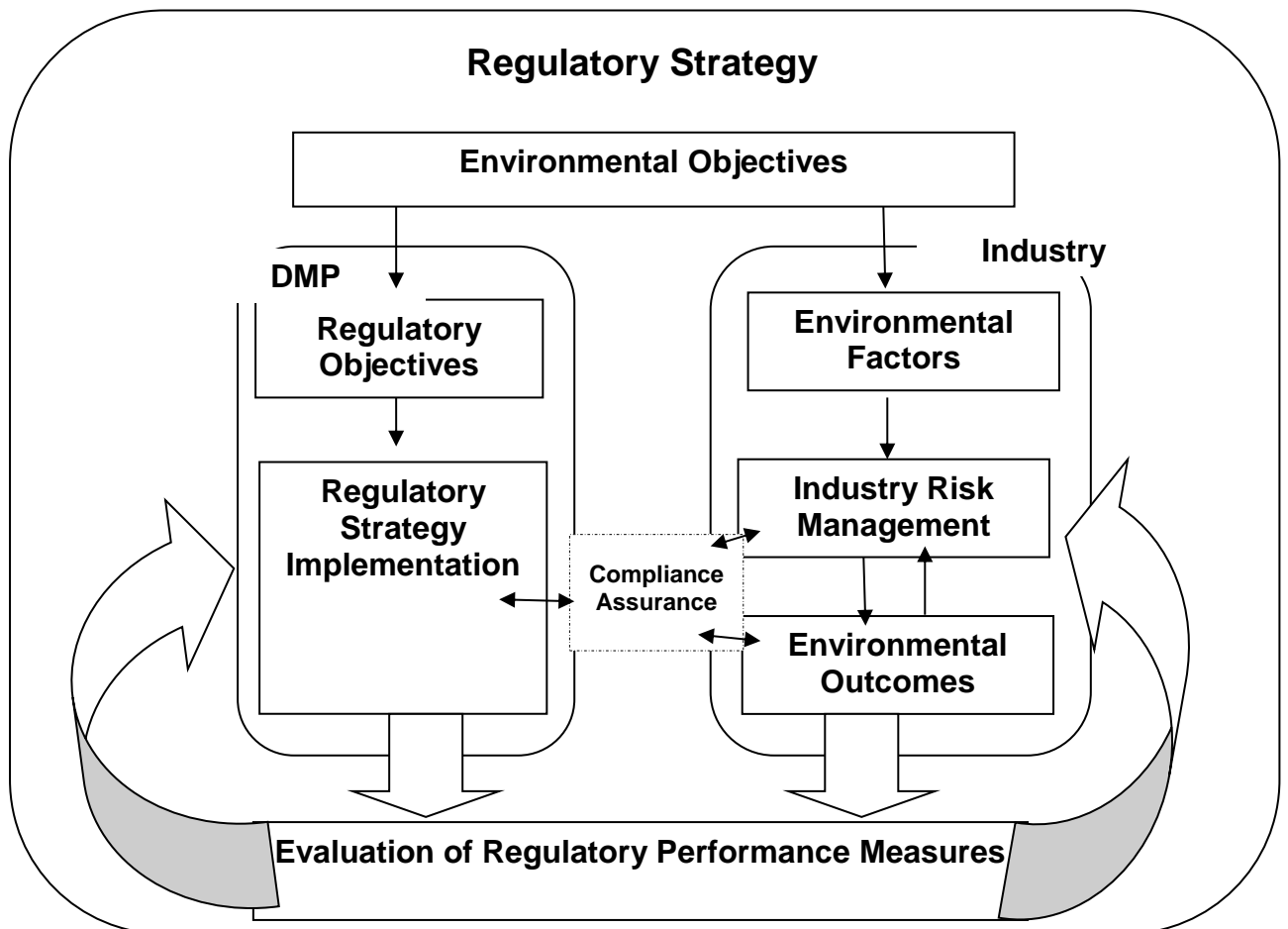
<sup>1</sup> Environmental significance as identified in the Environmental Protection Authority's Environmental Assessment Guidelines 9: *Application of a significance framework in the environmental impact assessment process*

## 2 Regulatory Strategy

This regulatory strategy articulates the long term objectives of DMP's environmental regulation program and the strategy to achieve these objectives.

The success of the regulatory strategy is dependent on the collection of information and data for evidence-based, robust decision making.

Just as the industry is responsible for monitoring the success of its risk mitigation to adaptively manage the environmental risks of its activities, the Department is responsible for monitoring the success of its regulatory program so it can appropriately target its compliance and enforcement efforts.



**Figure 1.** The DMP regulatory strategy relies on evidence-based adaptive management to identify new and emerging environmental risks and trends and identify the efficiency and effectiveness of the strategy implementation.

The Environmental Objectives (section 3) provide a clear purpose for both DMP's Regulatory Objectives (section 4) and industry's Risk Management of their activities (section 6).

The Regulatory Objectives (section 4) identify DMP's regulatory activities for achieving the Environmental Objectives (section 3), and will guide its Strategy Implementation (section 5).

Information gathered through industry reporting, compliance auditing and inspections informs a proactive compliance program to provide reasonable assurance to the community that industry is undertaking responsible development (Section 7). The collation of information and data on each of these elements will underpin the evaluation of Regulatory Performance Measures (section 8) to determine the effectiveness of the regulatory strategy to achieve environmental objectives and the regulatory efficiency by which it is implemented.

### 3 Environmental Objectives

A risk-based regulatory approach requires a clear definition of the objectives to provide clear direction and parameters to guide industry's risk management of their activities (Section 6) and provide the foundation of measuring the success of the regulatory framework (Section 8).

The overall objective of DMP's environmental regulation is that:

- *resource industry activities are designed, operated, closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed environmental outcomes and end land-uses without unacceptable liability to the State.*

DMP will set clear environmental objectives for both the mining and petroleum industries to align with legislative requirements. These will be available in publicly available guidelines.

### 4 Regulatory Objectives

Regulatory Objectives will inform the design and implementation of DMP's regulatory activities to achieve the environmental objectives. This Regulatory Strategy identifies the Regulatory Objectives as follows:

1. Environmental approval requirements on industry ensure projects are designed and operated to minimise risks to the environment to an acceptable level
2. Environmental performance monitoring requirements on industry during operations ensure that they detect and successfully manage new and emerging risks
3. The regulator detects non-compliance, and specific and general emerging risks to the environment
4. The regulator undertakes effective actions to address non-compliance and specific and general emerging risks to the environment
5. Sites are successfully closed, decommissioned and rehabilitated to agreed end land uses.

DMP will set Regulatory Performance Measures against all of the Regulatory Objectives to evaluate the effectiveness and efficiency of its implementation.

## 5 Regulatory Strategy Implementation

### Framework

Establishing a risk and outcomes based regulatory framework will ensure that DMP's regulatory effort is targeted and proportionate and effectively manages environmental risks.

The regulatory strategy is:

- outcomes based: sets clear environmental outcomes to guide environmental risk assessment and management
- risk based: identifies risks to achieving those outcomes and targets effort on minimising and managing those risks
- evidence based: gathers intelligence on industry and regulatory performance to ensure effective and efficient implementation, and adapts regulatory activity in response to emerging risks and trends.

The regulatory strategy is modelled to align with the principles of best practice government administration as set out below:

Effective	DMP's service delivery contributes to the achievement of environmental outcomes
Targeted	DMP's service delivery is targeted on minimising risk to environmental outcomes
Proportional	DMP's service delivery is proportional to risk or harm.
Predictable and consistent	DMP's service delivery is predictable and consistent according to clear standards, procedures and guidelines.
Authoritative	DMP is well informed, evidence-based, detects non-compliance, undertakes effective enforcement, and has an excellent reputation
Efficient	DMP has clear procedures and processes utilising information systems , innovation
Transparent	Information is well managed and available and informs operational decision making, policy development and public opinion.
Accountable	DMP will be subject to public and industry scrutiny on the performance of its service delivery.
Inclusive	DMP engages with industry and the community to promote environmental compliance and set standards

## Responsibilities

Government is responsible for:

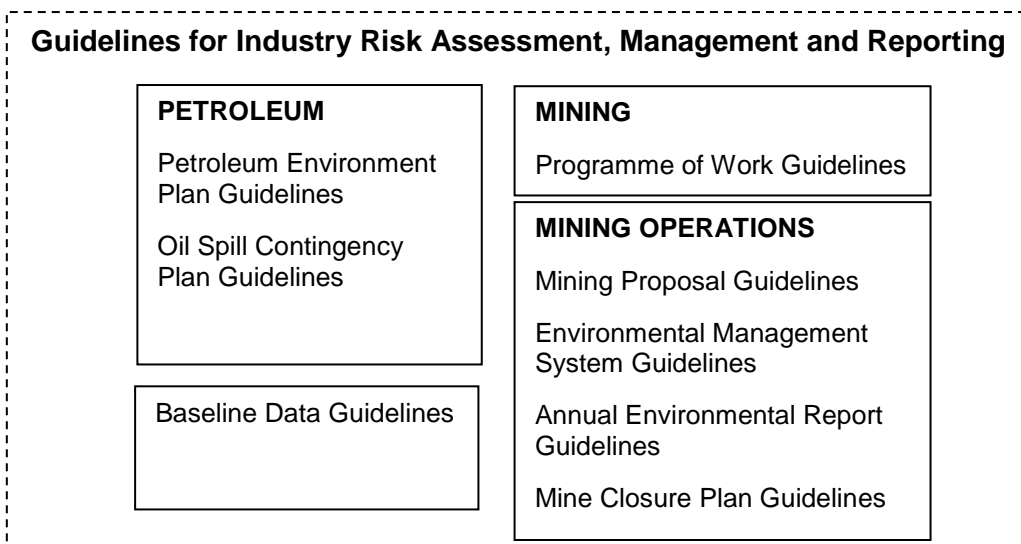
- establishing a clear process for industry to assess and manage risks to achieve environmental outcomes
- assessing applications to ensure environmental outcomes are acceptable and the industry applicant demonstrates they have the capacity to effectively monitor and manage risks
- supporting innovation and continuous improvement in environmental management, through the flexibility for industry to customise solutions to environmental risks at each site
- targeting regulatory activities to increased monitoring and auditing of industry performance and using evidence based decision making for strategic compliance programs.

Industry is responsible for:

- early stakeholder engagement to consult and inform project design where appropriate
- assessment of project risks to environmental outcomes and where necessary design fit for purpose solutions and management strategies to reduce risks to as low as reasonably practicable and an acceptable level
- ongoing monitoring and assessment of environmental performance and success of management strategies, and implement actions to minimise risks
- reporting on compliance and environmental performance to inform on-site environmental risk management and provide evidence of performance to the regulator.

## Guidance Material

The following guidelines will be revised or developed in order to support the successful implementation of the regulatory strategy. These will identify Environmental Factors, Environmental Outcomes, expectations of Industry Risk Management and reporting for Compliance Assurance.



# Industry Risk Management

Sections 6 and 7 identify the obligations on industry and regulatory activities undertaken to achieve the Regulatory Objectives identified in Section 4. The successful implementation of this strategy will be assessed by Regulatory Performance Measures, as described in Section 8.

## Environmental Factors and Outcomes

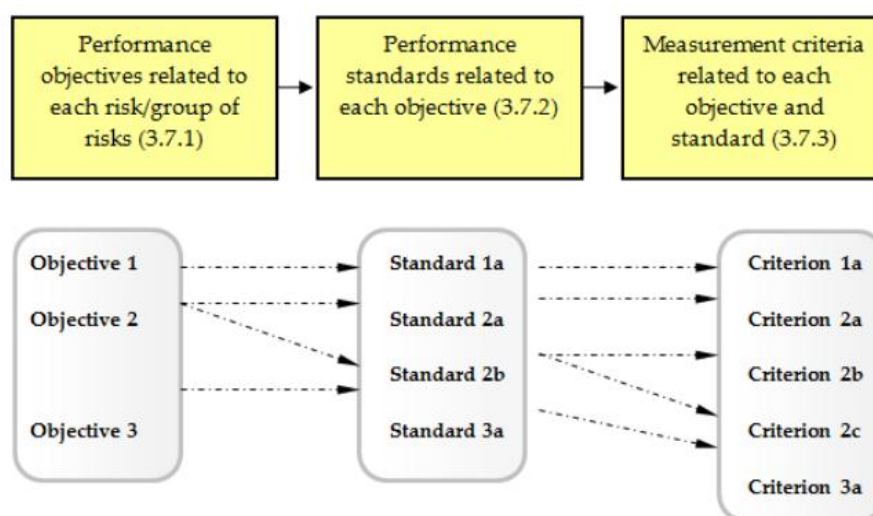
Environmental factors are matters against which industry are expected to assess the risks of their activities, such as groundwater, fauna and native vegetation.

Environmental outcomes are the site specific impacts on those factors resulting from the activities following an assessment and mitigation of risks (as discussed further below).

DMP will set clear expectations on acceptable environmental outcomes. The guidelines for both petroleum and mining applications will set the relevant environmental information to guide risk assessment.

DMP will undertake consultation and collaboration with industry and relevant expertise to ensure supporting guidance materials are well-informed, relevant and up to date.

It is industry's responsibility to clearly identify their environmental outcomes for their activities and how they will be measured, monitored and achieved. For example, Figure 2 below describes the system as required by the Petroleum Environment Plan Guidelines.



**Figure 2.** System of measurement criteria and standards to demonstrate achievement of Performance Objectives, as depicted in Petroleum Environment Plan Guidelines.

## REGULATORY OBJECTIVE 1:

**Environmental approval requirements on industry ensure projects are designed and operated to minimise risks to the environment to an acceptable level.**

- **Information Requirements**



The information required from industry for assessment is tailored and proportional to the size, scope and risks posed by the activity type and the characteristics of the receiving environment. Where management methods and the receiving environment are well understood and known to be low risk, there is limited value gained from a tailored risk assessment and standard conditions could apply. DMP will provide clear guidelines on expectations of information required from industry in order to assess proposed activities.

- **Risk Assessment**

The model is based upon key principles of risk assessment and management.

Industry is responsible for undertaking the risk assessment for their operation, identifying the appropriate management actions, identifying environmental outcomes as auditable commitments, and keeping this information current for their operations.

Industry needs to demonstrate that, through design and management actions, environmental risks are as low as reasonably practicable, and the risks are environmentally acceptable.

Industry is required to consult with all relevant stakeholders and report on the outcomes of the consultation and detail the comments received. Consultation will ensure stakeholder awareness and inform the operators risk identification process of potential impacts on stakeholders.

- **Assessment and Approval**

DMP must be satisfied that the process of the risk assessment undertaken by industry has been robust, adequate and reasonable; they have ongoing capacity to monitor, measure and manage their performance; and the risks and environmental outcomes are environmentally acceptable.

## **REGULATORY OBJECTIVE 2:**

**Environmental performance monitoring requirements on industry during operations ensure the detection and successful management of new and emerging risks**

- **Industry Risk Management**

Industry is responsible for the ongoing monitoring of their environmental risks to identify and assess any new or increasing risks, and implementing actions to minimise or avoid those risks.

- **Reassessment**

For both mining and petroleum activities the operator must provide a new proposal if there are new or emerging risks or if there is a substantial departure from the original activities approved.

## **7 Compliance Assurance**

An outcomes-focused regulatory system requires robust compliance monitoring, reporting and data management to evaluate the performance of the industry in achieving environmental outcomes.



The increased efficiencies delivered through a risk-based, outcomes-focused assessment system will enable DMP to target its resources on compliance assurance, inspections and enforcement.

### **REGULATORY OBJECTIVE 3:**

**The regulator detects non-compliance, and specific and general emerging risks to the environment.**

DMP will have a high rate of detection of non-compliance events and identify emerging risks through a combination of industry reporting obligations and a robust audit and inspection regime. Specific risks refer to particular sites and general risks refer to identified trends across the industry.

- **Industry Reporting**

The proponent reports on compliance and environmental performance, including incident reporting. The information provided is used by DMP for compliance assurance, establishing operational risk profiles for compliance planning, and identifying industry performance as a whole.

Reporting mechanisms are in place for industry to measure and report on performance against its committed environmental outcomes. These range from annual reports, activity reports and close out reports (as appropriate) and clear requirements for incident reporting.

Serious incidents are immediately reported (determined in the approval of a proposal as having a high or moderate environmental impact) and less serious incidents are reported within a timely period.

- **Audits and Inspections**

DMP has a strong compliance and auditing presence to ensure risks are managed and outcomes are being achieved.

### **REGULATORY OBJECTIVE 4:**

**The regulator undertakes effective actions to address non-compliance and specific and general emerging risks to the environment.**

- **Enforcement Actions**

DMP swiftly employs appropriate enforcement tools to address specific non-compliance and environmental risks, and provides a deterrent to non-compliance to maintain the integrity of the regulatory regime. Quarterly enforcement reports are published identifying enforcement actions taken.

- **Compliance Programs**

DMP will publicly release an annual compliance plan summarising the types of activities or risks to be targeted in the upcoming compliance program. Analysis of industry performance data will be used as evidence to underpin proactive regulatory interventions addressing industry compliance trends and issues.

Compliance planning will incorporate latent resources in order to respond to emerging and immediate high risk incidents.

- **Evaluating Performance**

Industry reporting against environmental outcomes will inform the 'Outcomes' indicators of the Regulatory Performance Measures (Section 8) as a way of evaluating the effectiveness of the regulatory framework.

#### **REGULATORY OBJECTIVE 5:**

**Sites are successfully closed, decommissioned and rehabilitated to agreed end land uses.**

DMP has clear requirements for the closure, rehabilitation and relinquishment of project sites.

Closure planning is integrated into project design and implementation to ensure a greater likelihood of success, with end land uses informed by stakeholder consultation where appropriate.

## **8 Regulatory Performance Evaluation**

DMP will evaluate its regulatory performance and the effectiveness of its regulatory strategy via the development, monitoring and analysis of performance measures. Types of measures are indicated in Table 1.

Information systems will facilitate the collection, collation and reporting of data to inform the performance measures across all aspects of regulatory activity.

Industry data on environmental performance provides the environmental outcomes measures and establishes the context by which the effectiveness of the regulatory strategy is assessed.

**Table 1. Types of Measures**

	<b>Efficiency Evaluation</b>		<b>Effectiveness Evaluation</b>	
<b>Indicator</b>	<b>Input Indicator</b>	<b>Output Indicator</b>	<b>Intermediate Outcome Indicator</b>	<b>Outcome Indicator</b>
<b>Measures</b>	<b>Resources</b> Staffing Training and Development ICT systems	<b>Products/ Services</b> Assessments completed, Inspections conducted, Guidance documents	<b>Progress towards outcomes</b> Changes in behaviour, knowledge or environment resulting from program activities	<b>Achievement of outcomes</b> The real outcomes of regulation - the state of environment and public confidence
<b>Examples</b>	Staff number Cost per activity	Number of outputs	Changes in industry procedures or processes, introduction of management systems	Environmental Outcomes performance

DMP monitors and reports on Regulatory Performance Measures to:

- evaluate the success of the regulatory strategy in achieving environmental outcomes
- manage regulatory performance to ensure continued efficiency by assessing the inputs and outputs required to achieve outcomes
- learn from performance reports to adapt regulatory resources and drive continuous improvement
- maintain transparency and accountability to the community by public reporting of performance measures relevant to stakeholders.

The evaluation of regulatory performance measures ensures resources are appropriately allocated and the regulatory system is flexible enough to adapt to performance trends and new information.

## **9 More information**

For more information on the environmental regulation of the mining and petroleum industries, assessment guidelines and updates please visit: [Department of Mines and Petroleum](#)