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Risk-based Approach to EIA – update

Introduction

Western Australia's environmental impact assessment (EIA) process is a critical component of the Government's approvals process. In February 2008 the Environmental Protection Authority (EPA) initiated a review of the State's EIA process with the aim of enhancing the quality, timeliness and certainty of the EPA's advice to Government on development proposals.

The EPA completed the review earlier this year and the final report was published on 30 March 2009.

The EIA review identified the use of a risk-based approach to EIA as a key initiative to improve the efficiency, transparency and consistency of the EIA process. A discussion paper outlining the risk-based approach was prepared during the review and was published in Appendices 2 and 3 of the final report which is available at <http://www.epa.wa.gov.au/eiareview.asp>.

When the final report was released in March 2009, the EPA endorsed, in principle, a risk-based approach to EIA. The EPA is now evaluating the approach with a view to gradual introduction after refining and confirming the methodology and developing an implementation strategy, including training and communication programs.

The EPA advised at the time of the final report that, until a new risk-based approach is confirmed, the current approach to EIA remains in place.

Application to date

The EPA is mindful that a new risk-based approach will introduce new concepts and terms, require a consistent approach to classifying consequences, and confront the different, but equally legitimate, views of stakeholders about the 'values' of the environment.

To inform the development of the risk-based approach, the methodology outlined in the discussion paper is currently being applied to two proposals in separate sectors.

- offshore petroleum production – Chevron's Wheatstone LNG project near Onslow (Environmental Review and Management Programme level of assessment), and
- iron ore mining - Australian Premium Iron Joint Venture's West Pilbara Iron Ore project (Public Environmental Review level of assessment).

Chevron's scoping document, developed using the risk-based methodology, was finalised and approved in June 2009 and may be viewed at <http://www.chevron.com/countries/australia/wheatstone/environment/>. Chevron is now preparing its ERMP document, including the development of project-specific consequence criteria.



Environmental Protection Authority

Australian Premium Iron's scoping document was approved in October 2009 and may be viewed at <http://www.apijv.com.au> by selecting the link under Environment & Community/Environment.

Both proponents have conducted a series of workshops with stakeholders to assist in the development of their scoping documents.

They have also engaged independent facilitators to assist with the application of the risk based approach and report separately to the EPA on the knowledge gained from the process.

Preliminary observations

A number of preliminary observations about the use of the risk-based approach are listed below. These reflect shared experience in the two proposals that have both reached a stage where their environmental review documents are in preparation. Risk tables are now being revised, based on more complete knowledge from environmental studies carried out in accord with the respective environmental scoping documents. Observations are:

- the approach is systematic, transparent, thorough and comprehensive, and has not resulted in significant issues being discarded as low risk early in the process;
- a low risk ranking for a particular impact does not necessarily lead to reduced consideration in the EIA as stakeholders may in some instances expect increased justification of the 'low' ranking because of the nature of values at risk;
- the approach has been resource intensive due to the exhaustive list of risk rankings that need to be generated and considered by proponents and stakeholders;
- the resource commitment is problematic for non government organisations and so efforts have been made by industry to provide a facility to support their involvement;
- the level of participation by decision-making authorities is essential but may not be sustainable if required for all environmental assessments;
- the resource commitment may be unattractive to many proponents, but attractive to larger companies that are currently developing their own risk-based environmental analysis processes to meet their individual business objectives;
- the framework for early and ongoing stakeholder involvement has been very beneficial in developing joint understanding and planning;
- the risk-based approach is an outgrowth of existing risk analysis processes in other fields, the ISO 14001 environmental management system and the EPA's existing environmental assessment process, consequently differences in terminology require further clarification;
- standardisation of terminology and methodology, and transparency around assumptions and levels of uncertainty are critical;
- a critical area for improving the efficiency of the risk-based assessment process would be the development of generic consequence criteria for each environmental factor; and
- some proponent effort on risk-based assessment will also assist development of their Environmental Management Systems.

Next steps

The EPA considers that the risk-based approach in its current form is unlikely to deliver an immediate improvement in timeliness of assessments, which is a key objective of the EIA Review. In the short term this objective is more likely to be achieved by other reform



initiatives, including re-introduction of EPA issued guidelines (ie scoping documents) for simpler proposals.

Nevertheless, the risk-based approach has some important advantages for the assessment of complex and controversial proposals, including transparency, rigour, a framework for stakeholder involvement and early recognition by the proponent of environmentally critical proposal design sensitivities.

Also, there is a growing trend by larger companies to develop their own environmental risk analysis and management processes in order to meet their business objectives. The EPA would like to encourage this trend and ideally to achieve standardisation of a risk-based approach to EIA in Western Australia.

For these reasons the EPA has decided to extend the development phase to allow more time to fully explore the possibilities. The risk-based approach represents a major shift in environmental assessment methodology at a time when development of environmental risk analysis is still in its infancy. The process would benefit from wider input from industry and the EPA will therefore collaborate with industry on further applications. Companies included in this arrangement would be those with an existing risk analysis culture, established internal risk management strategies and staff with relevant technical competency.

Additional applications will provide opportunities for those companies that are at the forefront in developing environmental risk analysis methodology to contribute to the development of the EPA's risk-based EIA process and for continuous improvement of the process over time.

There are two critical tasks that would contribute to improvement of the methodology:

- development of generic consequence criteria for each environmental factor; and
- revision of the EPA discussion paper on the risk-based process.

Generic consequence criteria

Development of generic consequence criteria for each environmental factor would greatly assist the efficient use of resources in developing risk rankings; however, achieving this goal is difficult, (particularly for fauna) because the regional significance of impacts is often not well understood due to gaps in scientific knowledge and because of the need for a consensus on relative values.

The EPA anticipates that the generic consequence criteria could be developed through a process of continuous improvement as the number of risk-based applications increases. At this stage the EPA does not intend to independently develop generic consequence criteria for each environmental factor.

Revision of the EPA discussion paper on risk-based assessment

The EPA is currently revising its discussion paper on risk-based assessment to reflect learnings from the applications so far. In particular, definitions and procedures are being refined to improve clarity and provide focus on expected outcomes. The revised paper will be reviewed for consistency with Australian Standards AS/NZS 4360:2004, HB 203:2006 and AS/NZS ISO14001:2004. This will enable proponents to adopt a consistent approach



throughout the life cycle of the project from the conceptual planning stage, through the EIA process, to implementation, operational management and finally to closure and rehabilitation.

It is intended that appendices will be added to the discussion paper after each application, setting out key items (such as consequence criteria) that will assist future proponents. In this way the discussion paper will remain a live document that will capture improvements as they occur. The discussion paper will be available on the EPA's web site.

In addition to the discussion paper, the EPA will provide links to proponent documents that were developed to meet the EPA's assessment requirements during the risk-based assessment applications.

In developing its position on the risk-based approach, the EPA will continue to be informed by the feedback from these early applications.

The EPA expects that the risk-based approach may lead to an improvement in EIA, but it may not be relevant or applicable to all projects.

If the EPA decides to formally implement the risk based approach it will first formulate standards and guidelines to confirm the terminology, methodology, consequence criteria and risk scales to be used.

The EPA will also ensure that implementation of a new approach is effective through a comprehensive training and communication program to inform industry groups, government agencies, interest groups and consultants.

Risk- Based Approach applications are currently restricted

Since the EPA's EIA review paper was finalised in March 2009, a number of proponents have been attempting to apply the new risk-based methodology in the preparation of their scoping and environmental review documents without prior arrangement with the EPA.

The EPA would like to emphasise that the new risk-based approach is still in the development phase and the participants are therefore restricted. Any proponent that meets the qualifications discussed above and that would like to contribute to development of the methodology should discuss the matter with the EPA Chairman.

All other proponents must continue to use existing assessment procedures and methodologies.