# BEST PRACTICE ENVIRONMENTAL REGULATION - THE WESTERN AUSTRALIAN APPROACH

by

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## 1. Introduction

One of the significant changes in the environmental management of industry is the willingness of some companies to accept responsibility for the environmental aspects of their operations. This reflects a shift in industry culture from reactive compliance with government regulations to voluntary proactive improvement of environmental performance. This cultural shift is consistent with the concept of "best practice environmental management" (Australian Manufacturing Council 1993a).

It is appropriate for government to consider regulatory changes which encourage and facilitate companies wishing to take on greater environmental responsibility. The Western Australian Department of Environmental Protection has introduced a new approach to pollution management consistent with the principles of "best practice environmental regulation"- the AMC's complement to BPEM (AMC, 1993b).

This paper first describes the reasons for the shift to BPEM and the principles of BPER. The change in approach to pollution management in WA is summarised and the underlying concept of "audited self management" is compared with other recent developments in environmental management. Finally how one of the new types of licence - a best practice licence - meets the principles of BPER is discussed.

## 2. Best Practice Environmental Management

### BPEM as a competitive advantage

With an increasing number of Australian companies competing in global markets, more of these companies are using the framework of "best practice" management approaches to maintain a competitive position. For some companies, long term viability is dependent on sound environmental performance. Some of the reasons for environmental performance providing a competitive advantage are as follows:

- as carrying capacity limits of receiving environments are approached or exceeded, possible expansion and in some cases continued operation of industry can be constrained;
- with urban encroachment towards industrial areas and rising community concern in relation to environmental quality, improved environmental performance is critical to public acceptance of industry;
- poor environmental performance can incur financial liabilities in fines, clean-up costs, compensation payments as well as negative market reaction;
- there is growing consumer demand for cleaner products and products made by cleaner technologies; and
- contaminant levels in raw materials are increasing requiring industries to improve pollution control performance to stay within emissions requirements.

### Cultural Shift

Some companies are adopting best practice environmental management (BPEM) approaches to achieve a competitive position in such circumstances. BPEM requires a cultural shift involving:

- the integration of production operations and environmental considerations;
- a focus on pollution prevention rather than pollution control; and

- an attitude of proactive and continual improvement rather than a reactive approach limited to compliance with changing environmental standards.

Under BPEM the acceptable level of environmental performance is no longer limited to compliance with regulations. Rather, comparison with the best environmental performance of peers and competitors (ie benchmarking) becomes the management criterion. Benchmarking implies a commitment to continual improvement to a moving target of better environmental performance.

## 3. Best Practice Environmental Regulation

### The Concept

The concept of best practice environmental regulation has been advocated by the Australian Manufacturing Council (1993b) to complement industry's adoption of best practice environmental management. AMC argued that "significant changes in a firm's environmental management practices can only occur if there is a corresponding change in the manner in which the regulatory environment is created and managed....overly prescriptive regulation can diminish internal firm efficiency, misallocate resources and discourage the adoption of BPEM". AMC saw that "the challenge in Australia is to encourage the advocates of BPEM to do more and for equivocating companies to move more quickly in adopting BPEM" and that "regulators must focus their efforts on producing demonstrable environmental outcomes".

### The Principles

Ten principles were identified as a basis for regulatory agencies to evaluate their environmental regulations:-

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| • certainty | - uniform and predictable objectives with variations for different environmental conditions and milestones for review clearly set out |
| • communications | - forums to provide information targeted to stakeholders using a range of media instruments |
| • consultation | - early discussions, regular forums with key stakeholders consulted |
| • cost-effectiveness | - standards need to be ranked on the basis of demonstrable benefit for the cost involved |
| • efficiency | -no delays, few regulators and clear documentation and processes |
| • flexibility | -outcome-oriented with a mix of tools and recognising changing technology and community standards |
| • integrity | -science-based decisions with due consideration of technical social and economic impacts |
| • practicality | - a collaborative approach with achievable objectives, measurable performance indicators and interim targets for long term objectives |
| • responsibility | -ownership of advice by regulators with clear decision making responsibility |

- transparency -a visible decision making process which is fair to all parties

With these principles of BPEM and BPER a revised approach has been developed by Western Australian Department of Environmental Protection.

## 4. WA DEP approach to Pollution Regulation

### Previous approach to licensing

The main elements in the previous WA approach to the environmental regulation of industry comprised:

- regulatory licences defining the pollution control requirements for a prescribed premises;
- licence fees for industries based on their production throughput; and
- punitive responses such as fines, abatement notices and gaol sentences for non-compliance with licence conditions or for pollution offences.

Although this approach can be effective in defining acceptable pollution control requirements and penalising unacceptable practices, it does not provide an incentive for the adoption of environmental responsibility by industry for improved environmental performance.

### Current Approach

With variable company attitudes to environmental management and variable capacity of companies to assume environmental responsibilities for their own operations. It is considered that several approaches to pollution regulation are appropriate (WA DEP 1996a, 1996b)

The main elements of the current approach are:

- best practice licenses: licences designed for industries committed to best practice environmental management where the responsibility and approach to meeting environmental performance requirements is determined by industry but with government overseeing the effectiveness and independence of the process.
- codes of practice: documents prepared by government indicating good environmental practice for adoption by industries which do not have the capability to determine the best environmental approach to the conduct of their operations: particular attention has been given to small scale industry. Industries would register their willingness to adopt the nominated operations rather than apply for a regulatory licence;
- monitored licences: licences specifying the main waste streams from an industry which would be monitored according to agreed and independently reviewed procedures. Maximum acceptable values would be specified but with licence fees based on the measured pollutant load;
- regulatory licences: licences prescribing operational and pollution control requirements for an industry and subject to inspection for compliance by government;
- load-based licence fees: rather than licence fees based on industry throughput which provides no incentive for pollution load reduction, licence fees are based on pollutant load and can be adjusted to achieve full cost recovery of licence administration; and

- multiple responses: rather than rely just on punitive responses, there will be a mixture of government responses of providing incentives for industry adopting sound environmental management while providing penalties for poor environmental performance.

### Part of a Broader Approach

This approach to licensing is part of a broader approach to environmental management being developed by the Department of Environmental Protection. This approach includes:

- the management of environmental systems whereby discharges are controlled to meet ambient environmental quality criteria for airsheds, watersheds and other receiving environments;

- project life cycle management whereby environmental management requirements are designed to match project decision making processes by proponents; and

- variable response by government to industry where there are incentives for environmental performers, assistance for those seeking help but penalties for wilful polluters.

## 5. Audited Self Management

The underlying theme of best practice licences and monitored licences is the concept of "audited self-management". This contrasts with the government prescription involved in "command and control" regulatory licences. Audited self management involves companies developing their own policies, procedures and plans to achieve agreed environmental outcomes and involves third party involvement in the certification of their environmental systems and auditing of environmental performance. However it differs from the concepts of self-regulation and co-regulation.

### Best Practice Licence Requirements

For an industrial premises to obtain a best practice licence it will need the following items in place:

- an environmental policy with a commitment to best practice and continuous improvement

- environmental performance objectives agreed with the DEP based on benchmarking against best practice for similar circumstances

- an environmental management manual indicating how operations are managed to achieve the environmental objectives with third party certification

- an environmental audit plan for checking compliance with operational requirements and performance objectives with independent third party involvement and sign-off

- an environmental improvement plan which sets out the goals and expected timing of the proposed improvements

- a system of control and verification for the implementation of corrective measures identified during audits as well as commitments to environmental improvements

- publicly available annual reports of environmental performance with CEO sign-off.

## Comparison with ISO 14000 series

The concept of audited self management is consistent with quality management principles. The components of a best practice licence form a package similar to an environmental management system envisaged in the ISO 14000 series. However best practice licences differ from ISO 14000 series requirements in the following ways.

The ISO 14000 series does not:

- require objectives and targets to be agreed with the regulator
- require an environmental improvement plan - only a commitment to improve
- guarantee environmental outcomes
- provide a benchmark for best practice
- specifiy external reporting requirements

There is also concern that the implementation of ISO 14000 series is focusing upon documentation of environmental management systems rather than envrionmental outcomes. For best practice environmental regulation the emphasis should be on outcomes.

## Comparison with Self Regulation

Audited self management differs from self regulation in order to overcome the three problems identified by Gunningham (1995) in relation to self regulation:

- the "assurance problem" with self regulation that other industries are being environmentally responsible, by, in audited self management, having requirements to be met to qualify for a best practice licence and having more direct regulation of industrial premises that don't meet best practice licence requirements.
- the "collective action problem" where self regulation requires other industries to police non-performing industries, while audited self management involves independent certification of performance and government intervention with sanctions for non-performance
- the "credibility obstacle" inherent in self-regulation by industry, with audited self management involving third party certification of environmental management systems and third party involvement in performance audits as well as public reporting of performance.

## Comparison with Co-regulation

Audited self management differs from co-regulation. Co-regulation involves consultation with stakeholders in the formulation and adoption of rules and regulations whereas audited self management requires agreement on environmental outcomes between industry and regulators but the means of achieving them is left to the company while auditing the outcomes.

## Comparison with Best Available Technology

The approach is also different from best available technology. Best practice is based on benchmarking against premises in similar circumstances, where circumstances include the potential for adverse impact as well as industry age, scale and location.

The best practice concept implies consideration of critical factors. Best practice environmental management focuses on critical environmental factors, in particular, the characteristics of the receiving environment and the potential for cumulative impacts.

### Monitored Licences

Monitored licences were devised as an intermediate step between regulatory licences and best practice licences. An industry would require the following to qualify for a monitored licence:

- an emissions inventory based on a waste audit and mass balance analysis
- monitoring of discharges above specified thresholds
- quantification of discharges by monitoring, process calculations or agreed and recognised methods.

Consistent with the concept of of audited self management there are quality assurance requirements for monitoring data covering data sampling, instrumentation and laboratory analysis (WA DEP 1996b).

### Registration System

The registration system was created for premises not warranting the level of management associated with licensing. Registration requires notification of location and operator, and a commitment to a code of practice. The codes of practice set out the environmental requirements. Compliance is checked by periodic inspections.

## 6. Best Practice Licences and BPER Principles

The Best Practice Licence concept meets the principles of Best Practice Environmental Regulation in the following way-

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| Certainty | Objectives based on benchmarking against best practice for similar circumstances while the environmental improvement plan defines future targets. |
| Communication/Consultation | Consultation has involved industry association working groups, seminars in industrial regions, and correspondence with licence holders. |
| Cost-effectiveness | Best practice implies a focus on critical environmental factors. |
| Efficiency | Means of achieving environmental outcomes determined by industry not regulators. |
| Flexibility/Practicality | Regulator involvement in environmental management requirements is limited to outcome setting. Technology changes incorporated in best practice benchmarking. |
| Integrity | Decisions are from Benchmarking based on industry best practice. |
| Responsibility/Transparency | Agreed benchmarking process with dispute resolution process available. |

Furthermore, the Western Australian approach also provides incentives to encourage greater adoption of best practice environmental management. The approach provides an intermediate step between regulatory licences and best practice licences - the monitored licence. For industries with low impact, the registration system has been introduced with commitment to codes of practice rather than prescriptive regulation as to the basis for pollution management.

The licence fee structure has also been devised to provide incentives for adoption of better environmental management as well as reflect the costs of government services (in line with the polluter pays principle). The licence fees involve two components:- a premises fee to cover administration costs and an emission load-based fee to cover technical services. Best practice licences incur a premises fee only - the cost of technical services being directly borne by the company through establishing its environmental management system and third party auditors. The regulatory licences incur a premises fee plus a load-based fee related to the licence limit. The monitored licences incur a premises fee plus a load-based fee related to the actual discharges for those discharges above a threshold level. For registration, there is a once-off registration fee rather than an annual licence fee.

## 7. Conclusion

The change in Western Australian approach to pollution regulation, particularly the concept of best practice licences, has been designed with the principles of best practice environmental regulation in mind. However it also draws upon the principles of quality assurance and seeks to overcome the shortcomings of self regulation by developing the concept of audited self management.

## 8. References

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