

THE PRECAUTIONARY PRINCIPLE - ITS ORIGINS AND ROLE IN ENVIRONMENTAL LAW

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This short paper discusses the concept of the precautionary principle, its origins, its application in Australia and internationally and its use in Indonesia.

The Concept

The precautionary principle in the context of environmental protection is essentially about the management of scientific risk. It is a fundamental component of the concept of ecologically sustainable development (ESD) and has been defined in Principle 15 of the *Rio Declaration (1992)*¹:

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

Although the term "measures" is not entirely clear it has generally been accepted to include actions by regulators such as the use of statutory powers to refuse environmental approvals to proposed developments or activities

Australian Environmental Legislation and Judicial Decisions

Australia has adopted ESD as a guiding principle of environmental management. The *National Strategy for Ecologically Sustainable Development (1992)*² adopts the precautionary principle as a "core element" of ESD as does the Inter-Governmental Agreement on the Environment, which is the basis for the current distribution of governmental responsibility for environmental management in Australia also.³

The precautionary principle has been included either specifically or by inference as part of ESD in numerous Australian environmental statutes. For example, the South Australian *Environment Protection Act 1993*⁴ (which deals with pollution and waste management) states that one of the objects of the Act is "to apply a precautionary approach to

¹ United Nations Conference on Environment and Development, Rio, 1992 (the "*Rio Declaration*").

² Commonwealth of Australia. 1992. *National Strategy for Ecologically Sustainable Development*.

³ *Inter-Governmental Agreement on the Environment. 1992* (Australia).

⁴ *Environment Protection Act 1993* (SA), section 10(1)(b)(iv).

assessment of risk of environmental harm although the term “precautionary approach” is not defined.

In New South Wales, the *Protection of the Environment Administration Act 1991*⁵ includes as one of several objectives, “the need to maintain ecologically sustainable development” and in defining ESD includes the precautionary principle⁶.

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* which, amongst other matters, contains the Commonwealth requirements for environmental impact assessment (EIA), states as an object the promotion of ecologically sustainable development⁷ which includes the precautionary principle⁸. In making certain decisions, including whether or not to approve a proposed development as part of the EIA process the Minister for the Environment and Heritage must take this principle into account⁹.

In the last decade or so several Australian Courts have applied or considered the precautionary principle in environmental disputes. In *Leatch v. National Parks and Wildlife Service*¹⁰ in the New South Wales Land and Environment Court, a third party objector challenged the decision by the Parks Service to issue a permit to a local council to “take and kill” endangered fauna in order to construct a road. It was argued by Leatch that various species of animal, including the giant burrowing frog and the yellow bellied glider, could be put at risk by the development and that there was insufficient scientific certainty about the impacts of the project on these species. It was argued that the precautionary principle should be applied.

The *National Parks and Wildlife Act 1974* did not specifically refer to either ESD or the precautionary principle. However, Judge Paul Stein refused the licence stating that “*the precautionary principle is a statement of commonsense and has already been applied by decision-makers in appropriate circumstances prior to the principle being spelt out*”.

There have been several other judgements from the NSW Land and Environment Court and from other Australian courts which considered the precautionary principle. In 1999 the South Australian Environment, Resources and Development Court handed down its judgement in the now well-known case of *Conservation Council of SA Inc. v. The Development Assessment Commission & Tuna Boat Owners Association*¹¹ ([1999]SAERDC 86). In that case the Development Assessment Commission(DAC) had approved under the *Development Act 1993* the developments of tuna farms within South Australian coastal¹². The Conservation Council believed that they were damaging to the

⁵ *Protection of the Environment Administration Act 1991* (NSW), section 6(1).

⁶ *Ibid.*, section 6(2).

⁷ *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth), section 3.

⁸ *Ibid.*, section 3A.

⁹ *Ibid.*, section 391.

¹⁰ 1993 *Local Government and Environment Reports* 270.

¹¹ (1999) SAERDC 86

¹² *Development Act 1993* (SA).

marine environment and that the DAC had failed to take into account the principles of ESD which the relevant development plan required to be followed in determining whether a proposal was acceptable.

Judge Trenorden agreed that the development included ESD as a valid planning criterion and accepted the precautionary principle as part of the concept of ESD. Her Honour determined that the onus lay with the proponent to demonstrate on the balance of probabilities that the proposals complied with the principles of ESD. To do so the proponent would have to demonstrate, in addition to the management measures that it proposed adopting, “*that the risk-weighted consequences of the development assessed together do not suggest that serious or irreversible environmental damage would be sustained*”¹³.

It is clear from Judge Trenorden's judgement that the burden of proving the acceptability of a proposal where there is scientific uncertainty about its impacts lies with the developer or proponent. This is also expressed in the Indian Supreme Court's judgement in *Nayudu* (see below).

However, there would appear to be a logical requirement that the opponent of the development must first argue that the potential impacts are sufficiently uncertain as to attract the precautionary principle. It has been suggested that in common law jurisdictions, at least, the burden lies with the opponent to trigger the application of the precautionary principle by proving on the balance of probabilities that a threat to the environment exists if the proposal proceeds. The burden of proof would then shift to the proponent to prove that serious or irreversible environmental damage would not be sustained. Again, it would appear that in a common law jurisdiction the degree of proof required of the developer would be the balance of probabilities.¹⁴

The Application of the Principle Internationally

Internationally, the precautionary principle has been directly or impliedly applied or referred to in judicial decisions in several countries. Justice Stein (see references and footnote 14) refers to cases decided in Britain,¹⁵ India,¹⁶ Pakistan¹⁷ and New Zealand¹⁸

¹³ (1999) SAERDC 86 at para.24 (16 December 1999).

¹⁴ See Farrier, D and Fisher, L., 1993 *Reconstituting Decision Making Process and Structures in Light of the Precautionary Principal*. Paper presented at the Precautionary Principle Conference, University of New South Wales, September, 1993. Referred to in Stein, P.L. *Are Decision-makers too Cautious with the Precautionary Principal?*, Volume 17, 2000, Environment and Planning Law Journal 3.

¹⁵ *R.v. Secretary of State for Trade and Industry Ex parte Duddridge and Others* (Queens Bench Division, 4 October, 1994 (unreported)).

¹⁶ *AP Pollution Control Board v. Nayudu*. Supreme Court of India SOL Case No. 53, 27 January 1999 (unreported).

¹⁷ *Zia v. WAPDA*. PLD 1994 Supreme Court 693.

¹⁸ *Greenpeace New Zealand Inc. v. Minister for Fisheries* (High Court of New Zealand, CP 492/93, 27 November 1995, unreported).

and also refers to judgements of the International Court of Justice¹⁹ and the European Court of Justice²⁰.

In *AP Pollution Control Board v. Nayudu* the Indian Supreme Court applied the precautionary principle in considering a petition against the development of certain hazardous industries. The Court held that ". . . it is necessary that the party attempting to preserve the status quo by maintaining a less-polluted state should not carry the burden or proof and the party who wants to alter it, must bear this burden".²¹

In *Zia v. WAPDA*²² The Supreme Court of Pakistan was called upon to consider a challenge by local residents to the construction of high voltage transmission lines in their locality. They argued that the electro-magnetic radiation (EMR) emitted by the transmission lines constituted a serious health hazard. In deciding that the scientific evidence in relation to the effects of exposure to EMR was inconclusive, the Court applied the precautionary principle.

It is apparent that whether or not the precautionary principle is specifically referred to in relevant legislation such as pollution control Acts or environmental impact assessment legislation, courts throughout the world are increasingly inclined to accept the principle as a means of dealing with scientific uncertainty in environmental disputes. The principle may fairly be regarded as an evidentiary tool in resolving dispute over the risks presented to the environment and to human health by certain types of development.

Additionally, there is now a considerable body of judicial opinion placing the burden of proving the acceptability of a proposal in this respect on the proponent, not the person arguing that it is environmentally unacceptable.

The principle also acts as a guideline to administrators and the courts in making decisions involving competition between economic development and the maintenance of environmental quality where the potential impacts are unclear.

The Application of the Principle in Indonesia

What is the potential for the precautionary principle to be applied in Indonesia? In recent years the Indonesian courts have had regard to the precautionary principle (or considered the issue of adequacy of scientific evidence that could have attracted the principal), both in the contexts of exposure to electro-magnetic radiation from overhead power lines²³ and death and destruction caused by landslides.²⁴

¹⁹ The *Danish Bees Case*. Judgement of 3.12.1998 in case no. 67/97.

²⁰ The *Danube Dam Case. Hungary v. Slovakia* (1998) 37 ILM 162, 204, 212 (see in particular the Separate Opinion of Judge Weeramantry).

²¹ See above, note 16: Rao, J.

²² See above, note 17

²³ The *Singosari Case* District Court, Gresik, East Java.

²⁴ *Mandalawangi Landslide Class Action Case (Civil Litigation)*. No. 49/PDT.G./2003/PN. District Court Bandung, 4 September, 2003.

Indonesian environmental legislation would appear to support the application of the precautionary principle in safeguarding the Indonesian environment. The preamble of the *Environmental Management Act*.²⁵ refers to "environmentally sustainable development" in clauses *b.*, *c.* and *d.* The last clause states that:

" . . . the implementation of environmental management in the scheme of environmentally sustainable development should be based on legal norms taking into account the level of community awareness and global environmental developments as well as international law instruments related to the environment".

Article 3 of Chapter II ("Basis, Objective and Target") of the Act states that:

"Environmental management which is performed with . . . a principle of sustainability . . . aims to create environmentally sustainable development . . .".

The preamble to the *Environmental Impact Assessment Act*²⁶ also refers to sustainable development (paragraph *a.*) and thus provides a context for the interpretation and application of that Act.

Therefore, in any dispute arising from either of the above two Acts it would be possible, as appears to have occurred in the *Mandalawangi Landslide Case* (see *footnote 24*), to argue before an Indonesian court that Indonesian administrators and the courts are bound by the precautionary principle as a core element of the principles of sustainable development.

The reference to sustainable development in the two Acts, combined with its adoption in international conventions and treaties and in a wide range of domestic laws and judicial decisions in different countries could provide a sound basis to ensure that developers who cannot satisfactorily demonstrate that the risk to the environment from their proposal is acceptable should not be permitted to proceed.

²⁵ *Environmental Management Act* (No. 23 of 1997)

²⁶ *Environmental Impact Assessment Act* (No. 27 of 1999)