

Oregon State Bar Sustainable Future Section

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The Long View

The Precautionary Principle

By Gail Achterman

The precautionary principle is an approach to decision-making in the face of uncertainty. The principle has been adopted in many international treaties since 1982, when it was included in the United Nations World Charter for Nature. It is a foundation for environmental policy in the European Union



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under the Maastricht Treaty of 1994. In 2003, San Francisco became the first government in the United States to make the principle the basis for its environmental policy. The principle is most often applied or invoked in the context of assessing the impacts of new technologies or human activities on the environment and public health, for example, to evaluate a ban on toxic chemicals such as mercury, restrictions on commercialization of genetically modified foods, or the use of growth hormones in livestock.

The principle builds on proverbs such as “an ounce of prevention is worth a pound of cure,” “better safe than sorry,”

and “look before you leap.” There are many definitions of the precautionary principle in policy literature and law, revealing a considerable lack of uniformity in its definition and its application.¹

The most widely known definition emerged from the Wingspread Conference, held in 1998 by the Science and Environmental Health Network:

“When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.”²

Hickey and Walker, in a seminal law review article, list all the definitions in international treaties and laws and make three observations. First, each definition includes the premise that pollution prevention is preferable to assigning responsibility

after damage has occurred. Second, the definitions assert that the degree of precaution required is primarily a function of the available scientific data. Third, the definitions require precaution in proportion to the risk of irreversible permanent damage to human life or health.³

R. B. Stewart identified four versions of the principle: (1) scientific uncertainty should not automatically preclude regulation of activities that pose a potential risk of significant harm (Non-Preclusion PP); (2) regulatory controls should incorporate a margin of safety; activities should be limited below the level at which no adverse effect has been observed or predicted (Margin of Safety PP); (3) activities that present an uncertain potential for significant harm should be subject to best available technology requirements to minimize the risk of harm unless the proponent of the activities shows that they present no appreciable risk of harm (BAT PP); and (4) activities that present an uncertain potential for significant harm should be prohibited unless the proponent of the activities shows that they present no appreciable risk of harm (Prohibitory PP).⁴

The principle has generally been used to provide overarching guidance or direction, not as an enforceable directive. For example, the President’s Council on Sustainable Development in 1996 recommended that “even in the face of scientific uncertainty, society should take reasonable actions to avert risks where the potential harm to human health and the environment is thought to be serious or irreparable.”⁵ It is reflected, however, in some specific environmental and public-health statutes, such as the Toxic Substances Control Act (allowing halt to marketing of new substances if EPA determines that they present an unreasonable risk) and the Food Quality and Protection Act of 1996 (requires pesticides to be proved safe for children).

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Footnotes

¹ D. Turner & L. Hartzell, “The Lack of Clarity in the Precautionary Principle,” 13 *Envtl Values* 449-60 (2004).

² <http://www.sehn.org/precaution.html>.

³ J. Hickey & V. Walker, “Refining the Precautionary Principle in International Environmental Law,” 14 *Va Env’t LJ* 423, 437 (1995).

⁴ R. B. Stewart, *Environmental Regulatory Decision Making Under Uncertainty*, 20 *Research in L & Econ* 76 (2002).

⁵ President’s Council on Sustainable Development, *Sustainable America: A New Consensus for Prosperity, Opportunity and a Healthy Environment for the Future*,