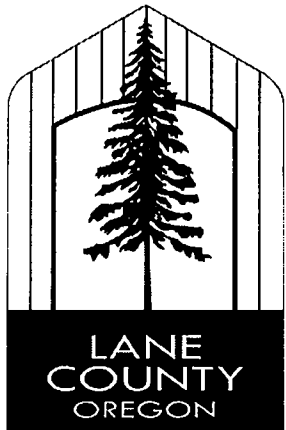


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Memorandum

To: Board of Commissioners

From: Stewart Bolinger, Auditor

Date: August 12, 2009

Re: Precautionary Principle

The attached summary presents my assessments and factual findings about key aspects of Precautionary Principle analysis and experience gleaned from limited direct discussions with practitioners and an extensive review of the popular literature on the subject.

I had said that I would supply a written summary of the results of the requested research so you could address it in whatever fashion you deemed suitable.

Next you will find my own summary opinions relative to conditions at the county and adopting the principle:

- A. In addition to our compliance with public disclosure rules and regulations, existing county processes and procedural rules mandating and voluntarily seeking public and staff comment, in my opinion, put substantial force behind an overarching element of Precautionary Principle advocacy and practice: Open and extensive vetting of the various considerations affecting health and environmental matters and the related public policies.
- B. Vigorous adherence to the principle appears to require three essential elements: 1) Organized public groups advocating for application of the principle on a sustained basis, 2) internal champions, and 3) Board commitment. Currently, neither organized non-governmental advocates nor a centralized purchasing staff with the means to execute a plan have materialized.
- C. Nothing bars official or unofficial endorsement of the principle and implementation to the degree achievable under current conditions.
- D. Adoption and implementation of the precautionary principle nationwide appears to be a total non-starter to date.

PRECAUTIONARY PRINCIPLE SUMMARY OF RESEARCH

Adoption Status Quo

Three counties and three cities out of 1600 counties and 400 cities in the U.S. have formally adopted a commitment to the Precautionary Principle. I found no data indicating consideration, adoption, or rejection taking place in the rest of those cities and counties. The references and discussions I found centered in the European Union countries.

Representatives of San Francisco and Berkeley were the only ones to respond to my requests for information:

San Francisco cited these changes post implementation:

1. A disparate set of purchasing standards and practices were consolidated in one comprehensive policy.
2. Environmental staff input into evaluation and purchase of chemicals, cleaners, insecticides, and similar substances was mandated and resulted in changed product selections.
3. Purchasing standards specifically mandated a broadened evaluation process aimed at identifying and using more environmentally benign chemicals or alternative control strategies for various uses.

Berkeley cited this change:

1. Because of their earlier adoption of an Environmentally Preferable Purchasing Policy, no material procedural changes followed adoption of the Precautionary Principle for purchasing.

Scope of Coverage – Health & Environment Main Thrust

1. San Francisco and Mendocino counties' implementation language stated that the Principle would apply county wide, and they started with environmental and health matters.
2. Health and Environmental references and examples dominated the literature discussing the Principle.

Major Principle Precautionary Principle Tenets

These two tenets dominated the Principle discussions I reviewed:

- First:** Expression of a need by decision-makers to anticipate harm before it occurs. Within this element lies an implicit reversal of the onus of proof: under the precautionary approach it is the responsibility of an activity proponent to establish that the proposed activity will not result in significant harm.
- Second:** Establishment of an obligation, if the level of harm may be high, for cautious action to prevent such harm even in the absence of scientific certainty.

Pro's & Con's Commentaries

The strongest written endorsements I found for the Precautionary Principle stated that use of the principle:

- Encouraged broad analysis of one's options including public comments and thereby diminished the impact of common human tendencies to (1) over emphasize avoidance of sure and immediate losses and (2) avoidance of unsure non-immediate losses.
- Became a major tenet of environmental protection discussions.
- Rejected an onerous burden of proof in the face of significant impediments to comprehensive evaluations of an unknown range of risks and options potentially affecting a community's health and environment.

Criticisms included the following:

- Alleged benefits of application of the principle fail to demonstrate that they arose from application of the principle or were not achievable or achieved without awareness of the principle.
- It lacks precision - no defined materiality threshold, no specified cost-benefit analysis standard or threshold, no indication which circumstances best fit application of the precautionary principle.

San Francisco and Mendocino Counties adopted these Precautionary Principle tenets:

1. **Anticipatory Action:** There is a duty to take anticipatory action to prevent harm.
2. **Right to know:** The community has a right to know complete and accurate information on potential human health and environmental impacts association with the selection of products, services, operations or plans. The burden to supply this information lies with the proponent, not with the general public.
3. **Alternatives Assessment:** An obligation exists to examine a full range of alternatives and select the alternative with the least potential impact on human health and the environment including the alternative of doing nothing.
4. **Full Cost Accounting:** When evaluating potential alternatives, there is a duty to consider all the reasonably foreseeable costs, including raw materials, manufacturing, transportation, use, cleanup, eventual disposal, and health costs evening if such cost are not reflected in the initial price.
5. **Participatory Decision Process:** Decisions applying the precautionary principle must be transparent, participatory, and informed by the best available science and other relevant information.