

Precautionary Principle
– From Vision Statement to
Practical Policy

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2004 Statewide HHW-Used Oil Conference

- **Collection and Reduction**
 - **Core Value of Preventing Pollution**
- **Series of plenary presentations examining:**
 - **Importance/Limitations of Science – determining cause and effect**
 - **Decision making to protect public health/environment**
 - **Public's right to know/Industry's responsibility to find out**

The Precautionary Principle

The Problem:

Determining when there is sufficient evidence of harm to initiate a protective action.

Sufficient Evidence of Harm?

- Lead in gasoline, paint**
- Asbestos in building materials**
 - Tobacco**
 - PCB's, DDT, CFC's**
- PVC, Brominated Flame Retardants**
 - Global Warming**

Rio Earth Summit 1992

Principle 15

- *In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities.*
- *Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.*

Wingspread Conference

1998

- *Where an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.*
- *In this context the proponent of an activity, rather than the public bears the burden of proof.*
- *The process of applying the Precautionary Principle must be open, informed and democratic, and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action.*

Moving From Theoretical Principle to Practical Policy:

Alternatives Assessment

Mary O'Brien

**Making Better Environmental Decisions:
An Alternative to Risk Assessment**

The Precautionary Approach: Risk vs. Alternatives Assessments

■ Risk Assessment

- What is an acceptable level of harm? (i.e. # of cancers in 1000 people)**
- Does this activity (product) fall within that acceptable level?**

■ Alternatives Assess.

- Is this potentially hazardous activity (product) necessary?**
- What less hazardous options are available?**
- How little damage is possible?**

**Selecting which alternative
is preferable is a
political/public decision**

San Francisco's Precautionary Principle Ordinance

- **Chapter One of a newly formed Environment Code – over arching principle**
- **For complete text see:**

www.sfenvironment.org

Five Tenets of SF Ordinance:

- **Duty to take anticipatory action to prevent harm**
- **Right to know complete and accurate information – burden on proponent to supply this information**
- **Decisions must be transparent, participatory, and informed by the best available information**

Five Tenets of SF Ordinance:

- **Duty to examine a full range of alternatives, including doing nothing**
- **Must consider the full range of costs, including costs outside the initial price**

Implementation



■ Arsenic Treated Wood

- **Evaluated health and environmental impacts**
 - *Sufficient evidence of harm*
 - EPA: cancer risk of 1.4 in 10,000 kids
- **Alternatives analysis revealed:**
 - Most applications have a less toxic formulation (ACQ, CBA)
 - Submerged Aquatic applications - arsenic treated wood is the most environmentally preferable formulation

Implementation

- **Regulations**
 - Integrated Pest Management
 - Arsenic-treated wood
 - Purchasing
 - Green Building
- **New Avenues for Discussion**
 - Recycled Water
 - Power Plant Development
 - Links to Environmental Justice
 - Land Use/Zoning Decisions
 - More possibilities....

The Precautionary Principle:

≠ Zero risk

= Minimize harm

≠ Zero science

**= Maximize
information/science**

**≠ Predetermined
outcome
(i.e. ban)**

**= Process for public
decision making**

Re-defining the Central Question for Decision Makers:

≠ Is it legal?

≠ Is it safe?

- **Instead: Is it necessary?**