



Chemical Classes and California's Safer Consumer Products Program: Challenges and Opportunities

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Cal/EPA

Impetus for CA Green Chemistry Statute

- Address consumer confusion
- Comprehensively address chemicals safety
 - Human health, environmental impacts, life cycle impacts
- Spur more green chemistry adoption
- Address problems with chemical bans
- Avoid the unintended consequences of regrettable substitutes
- Ask key questions about the chemical in the product
 - Is it necessary? Is there a safer alternative?



Regulatory principles

Practical

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Meaningful

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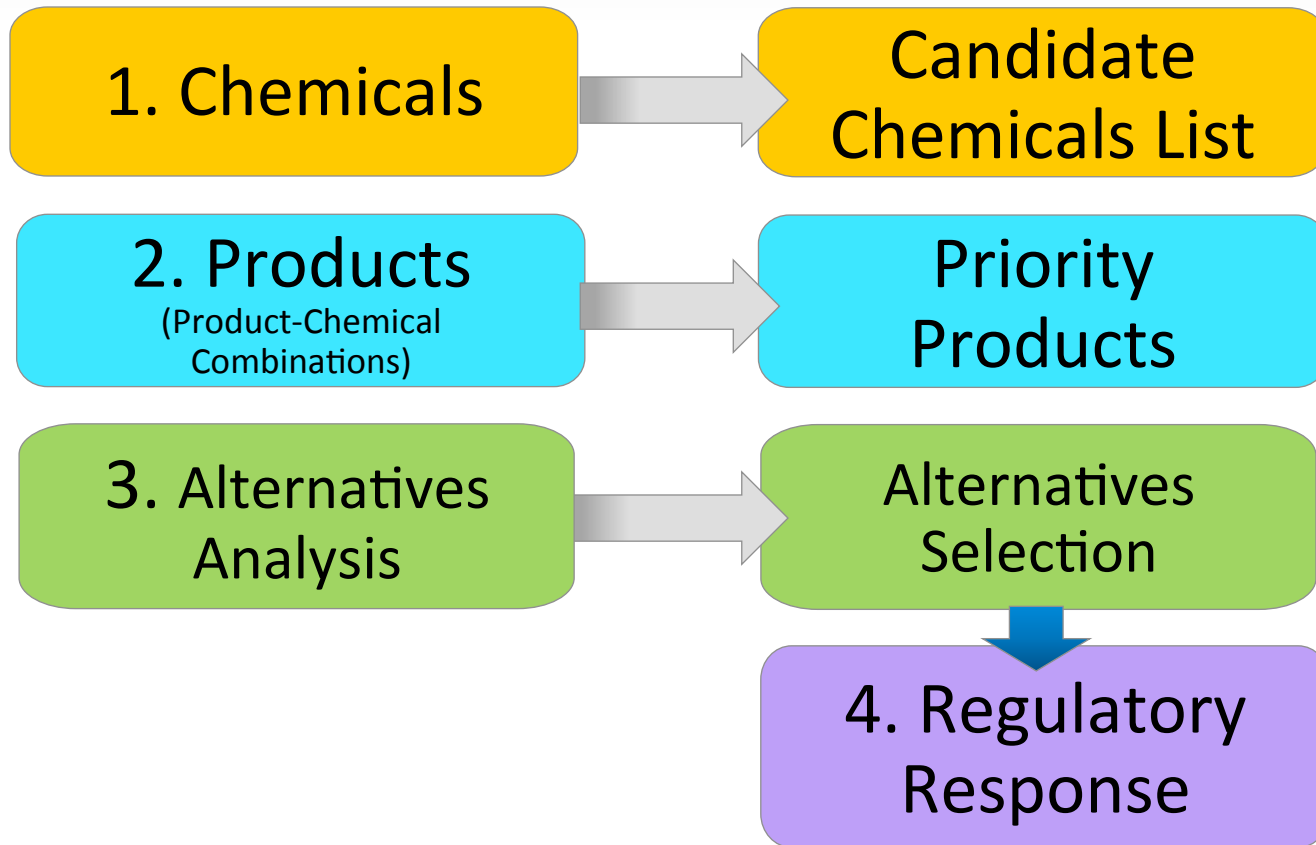
Legally Defensible



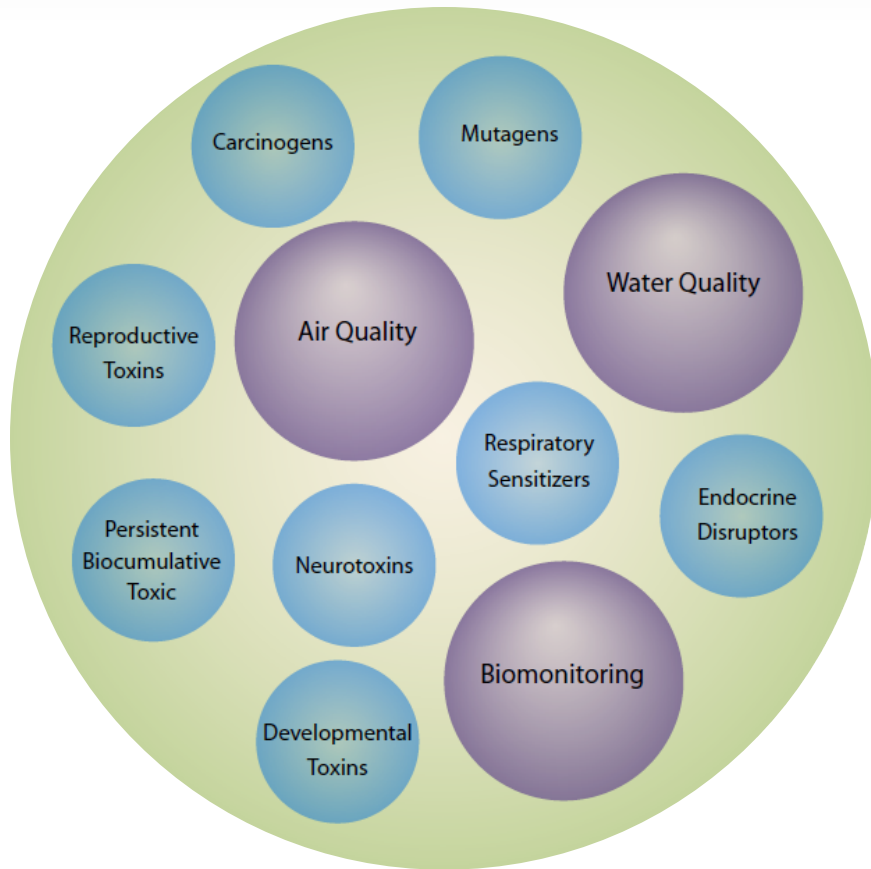
SAFER
CONSUMER
PRODUCTS



How it Works: The SCP Regulations



Candidate Chemicals



23 Authoritative Lists referenced

Exclusions

- FIFRA pesticides
- Prescription drugs
- Metabolite/breakdown products
- Radioactive chemicals
- Natural toxins

>1,100 Chemicals

<http://www.dtsc.ca.gov/SCP/ChemList.cfm>



SCP Candidate Chemicals List

- 160 chemicals groupings
 - PCBs, furans, petroleum distillates, dioxins, lead compounds
- Some authoritative lists reference classes
 - OSPAR – Polycyclic aromatic hydrocarbons
 - Biomonitoring CA – parabens (butyl, methyl, ethyl, propyl); phthalates (14)

Ultimately the SCP Candidate Chemicals is a list of individual chemicals

- Precedent in lists that aren't referenced by SCP
 - SIN list – alkyl phenols, azo compounds, nitrosamines
 - EPA TRI program – nonylphenols



Priority Product Selection Criteria

Potential exposure to the Candidate Chemicals in the product

AND

Potential for exposures to contribute to or cause significant or widespread adverse impacts



Product selection

- Must specify chemicals in Priority Product identification
- Chemical must be known to be in the product

Example: Initial Priority Products selection

Spray polyurethane foam containing diisocyanates



Spray polyurethane foam containing MDI



SCP Alternatives Analysis

Answers key questions

- Is it necessary? What is the chemical's function?
- Is there a safer alternative?
- Have regrettable substitutes been avoided?

2 stage process

- Screen for possible alternatives
- Detailed assessment of the alternatives

Chemical class approach can strengthen and expedite the AA process



Challenges and Opportunities

Practical

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Meaningful

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**Legally
Defensible**

- Consistent class definition
- Predictive tox challenging interpretations
- Consideration of classes allow broader impact
- Different endpoints in a class can lead to different bases for prioritization decisions
- Verification of the chemical in the product

