



Draft Stage 1 Alternatives Analysis Guide



Department of Toxic Substances Control



Cal/EPA

Welcome!

Reminder - Regulations vs. guidance

Helpful Information and resources

Decision making – storytelling

Not a linear process

Please give us feedback



About the Webinar

Introduce the Guide

Solicit comments for the Guide



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

SCP's Draft Stage 1 Alternatives Analysis (AA) Guide

Join DTSC for a webinar
to learn more about
the AA Guide

[GET WEBINAR INFO!](#) ▶



View the AA Guide
in CalSAFER and Provide Comments

[GO TO CalSAFER](#) ▶



Draft Stage 1 Alternatives Analysis Guide

Action:

The Department of Toxic Substances Control is seeking public comments on the Draft Stage 1 Alternatives Analysis Guide.

Summary:

California's Safer Consumer Products (SCP) program challenges product designers and manufacturers to reduce toxic chemicals in their products. The SCP regulations establish innovative approaches for responsible entities to identify, evaluate, and adopt better alternatives. The SCP approach requires an Alternatives Analysis (AA) that considers important impacts throughout the product's life cycle and follows up with specific actions to make the product safer. The Department prepared the Draft Stage 1 Alternatives Analysis Guide to help responsible entities conduct a first stage AA to meet the regulatory requirements. Public comments are specifically requested to provide the names of tools, methods, approaches, and data sources not already mentioned, as well as examples for steps and approaches to complete an AA.

Documents:

You may make comments on document(s) shown below by clicking on the corresponding "Submit" button.

Submit a comment

Submit a General Comment

Title

[Draft-Stage1-AA-Guide](#)

Submitted By

DTSC

Status

Open

Comment Period

September 24, 2015 to
November 16, 2015 11:59AM PST

Document Type

AA Report

Comments Published

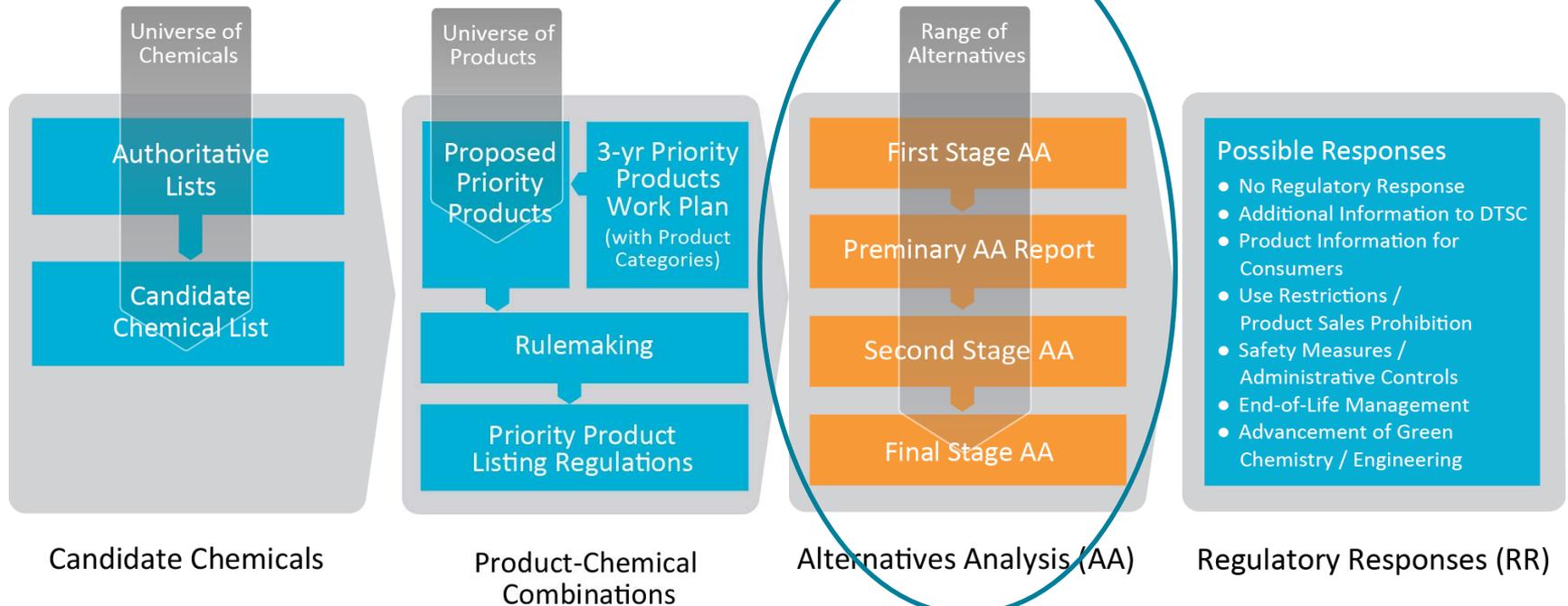
[View Comments \(0\)](#)

Supporting Documents



SCP Regulations: Four-Step Process

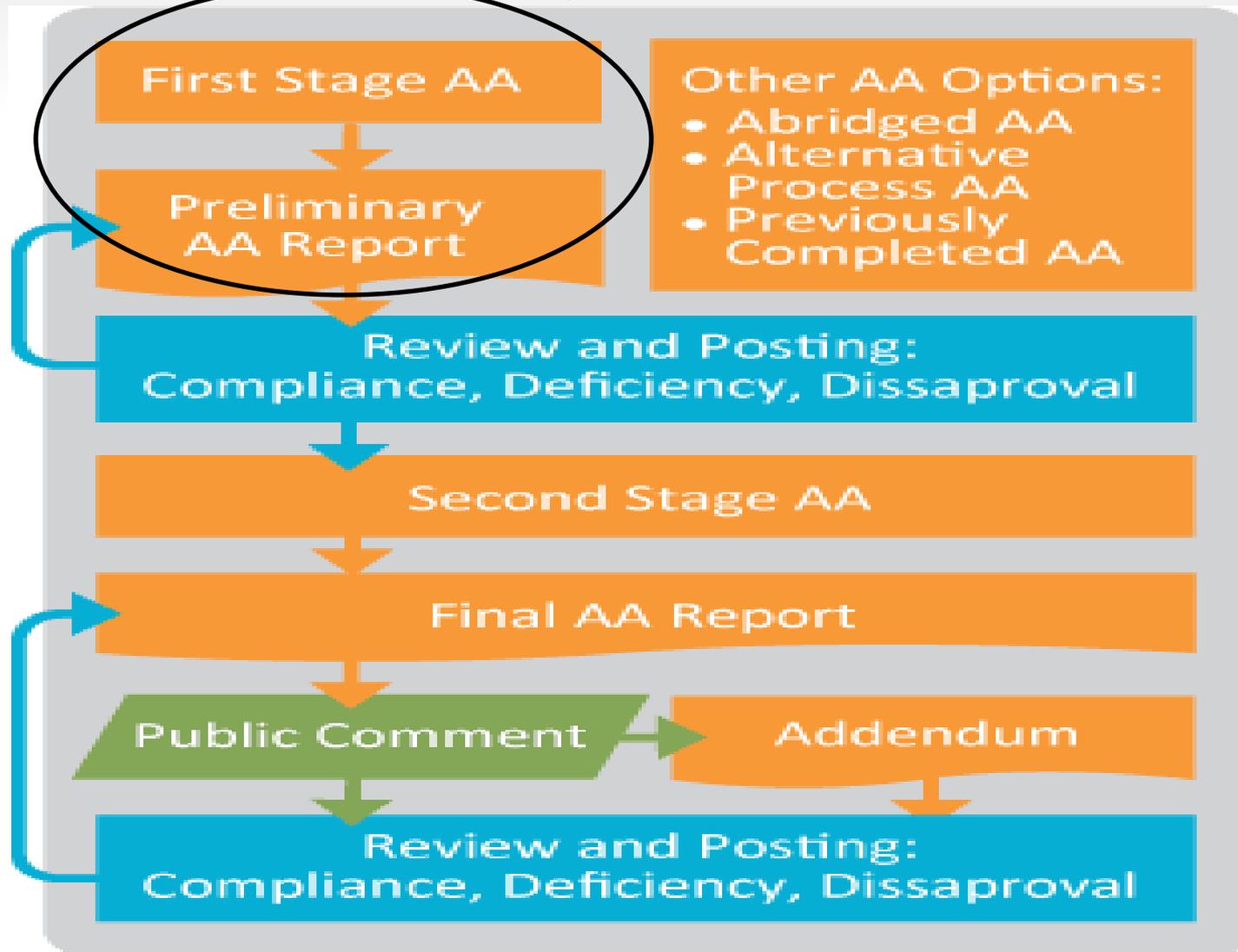
California Code of Regulations, title 22
Chapter 55. Safer Consumer Products
sections 69501 through 69510



Alternatives Analysis:
Article 5
section 69505



Alternatives Analysis Process

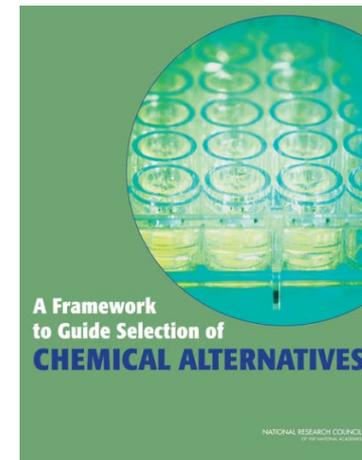
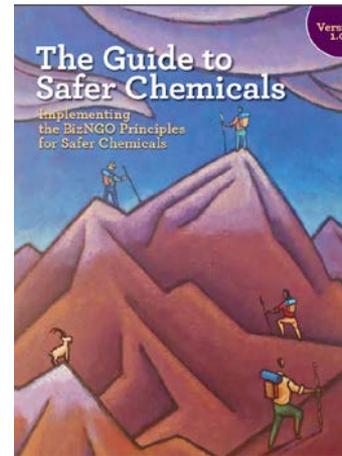
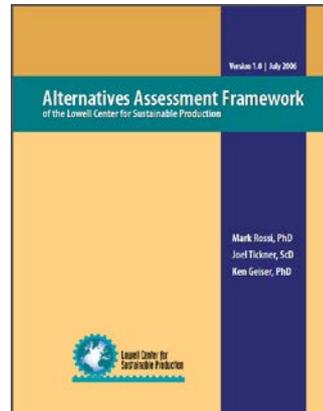
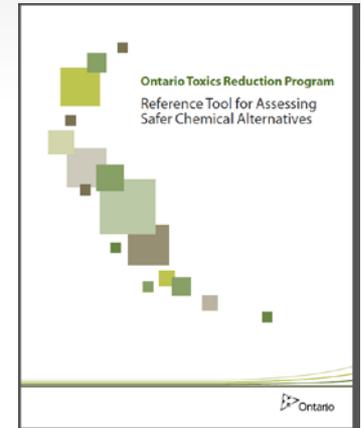
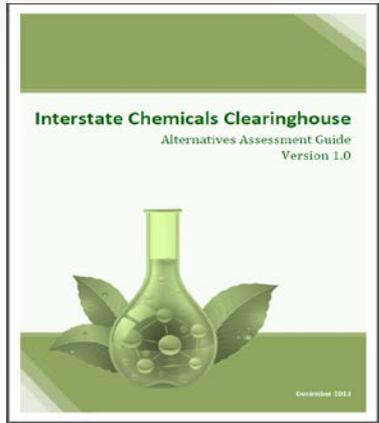


About the Guide...

The Guide IS:	The Guide IS NOT:
Guidance	Regulations
Dynamic	Static
Multi-purpose for multiple audiences	Meant to be used solely as a step-by-step guide
A menu of options	A checklist



About the Guide...



Differences Between SCP and Other AA Frameworks

Specific list of relevant factors

Economic Impacts

- Public Health and Environmental Costs
- Costs to Government and Non-Profit Organizations

Mandatory Life Cycle Consideration

Not Limited to Chemical Substitution

No Requirement to Generate New Data



How Guide is Organized

- First Stage AA

Chapter 1 – AA Framework

Chapter 2 – Product Requirements and
Alternatives

Chapter 3 – Relevant Factors

Chapter 4 – Impact Assessments

Chapter 5 – Screening Alternatives

Screening Analysis



How Guide is Organized

- Second Stage AA

.....Under development

Chapter 6 – Exposure Assessment

Chapter 7 – Life Cycle Impact Assessment

Chapter 8 – Economic Analysis

Chapter 9 – Information Needs and
Transparency

Chapter 10 – Alternatives Comparison

Chapter 11 – Review and Evaluation of AA Reports

In-Depth Analysis



Chapter 1: AA Framework

Two-stage AA Process

Other Compliance Options

Appendix: Required Information for AA Reports



Chapter 2: Product Requirements

Function and Performance

Legal Requirements

Role of Chemical of Concern

Identifying alternatives

Appendix: Data Sources for Identification of Alternatives



Example: Identifying Product Requirements and Alternatives

Product: Paint and varnish remover with Chemical X

Product Function: To remove paint or varnish from a particular substrate, such as wood or metal, to prepare it for new paint or varnish.

Chemical X Function: Dissolves paint by bonding to the chemical, causing it to separate from the substrate.

Performance: Amount of coating removed based on stripping time; condition of substrate after coating removal

Legal: None

Alternative products: *Should achieve the same function as the Priority Product.*

- *Chemical Substitute: Alternative chemical is likely to be another solvent.*
- *Alternative Product Design: Sand paper, blasting media, heat guns*



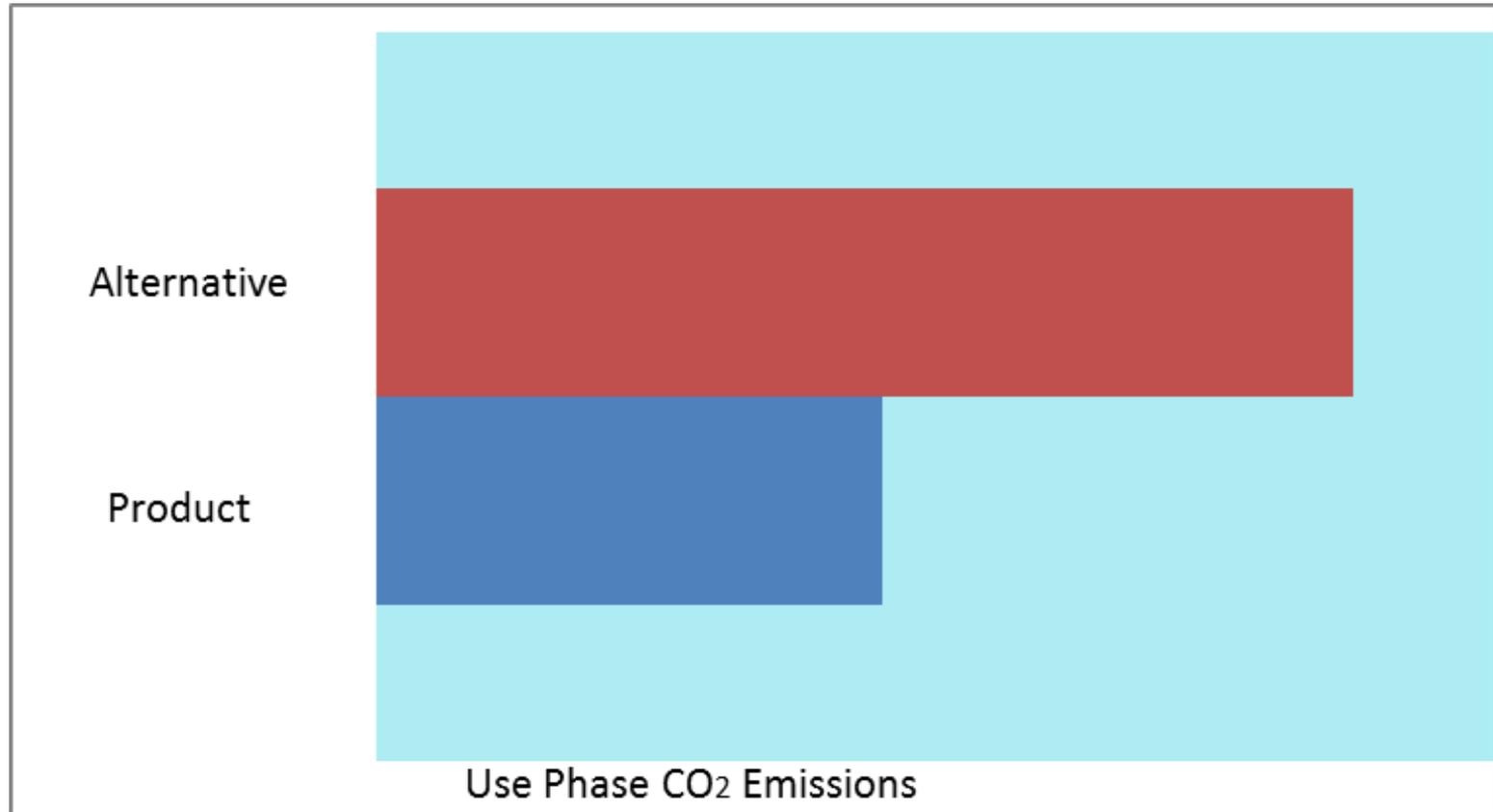
Chapter 3: Relevant Factors

Makes material contribution

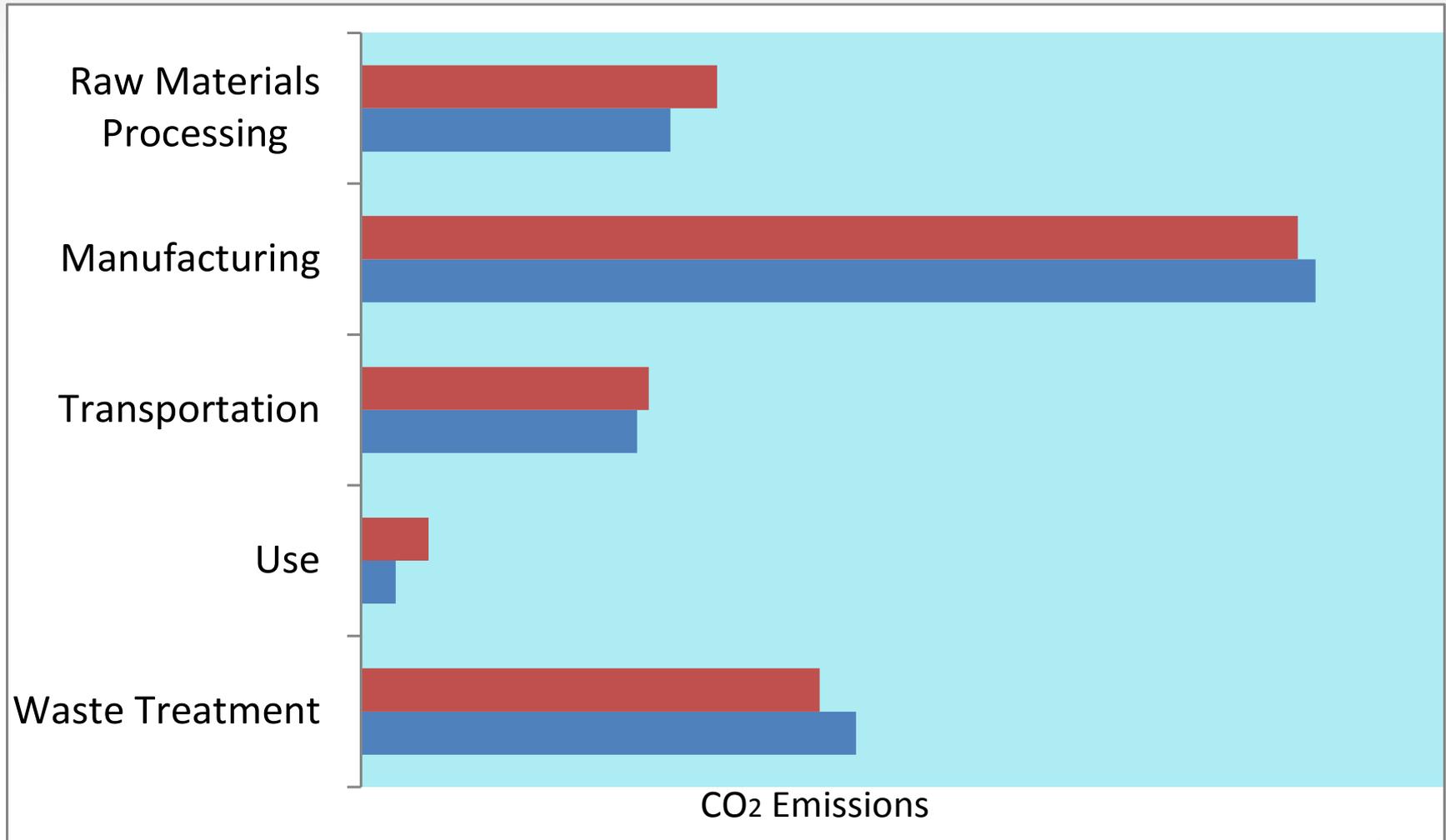
Material difference



Relevant Factors Example



Relevant Factors Example



Factors to be Considered for Relevance:

Adverse environmental impacts

Adverse public health impacts

Adverse waste and end-of-life effects

Environmental fate

Materials and resource consumption impacts

Physical chemical hazards

Physicochemical properties

Associated exposure pathways and life cycle segments



Factor Sub-category					
Adverse environmental impacts ²					



Relevant Factors to Consider In Second Stage

- Adverse Impacts and Multimedia Life Cycle Impacts
- Product Function and Performance
- Economic Impacts



Approaches to Relevant Factors Identification

Life Cycle Thinking

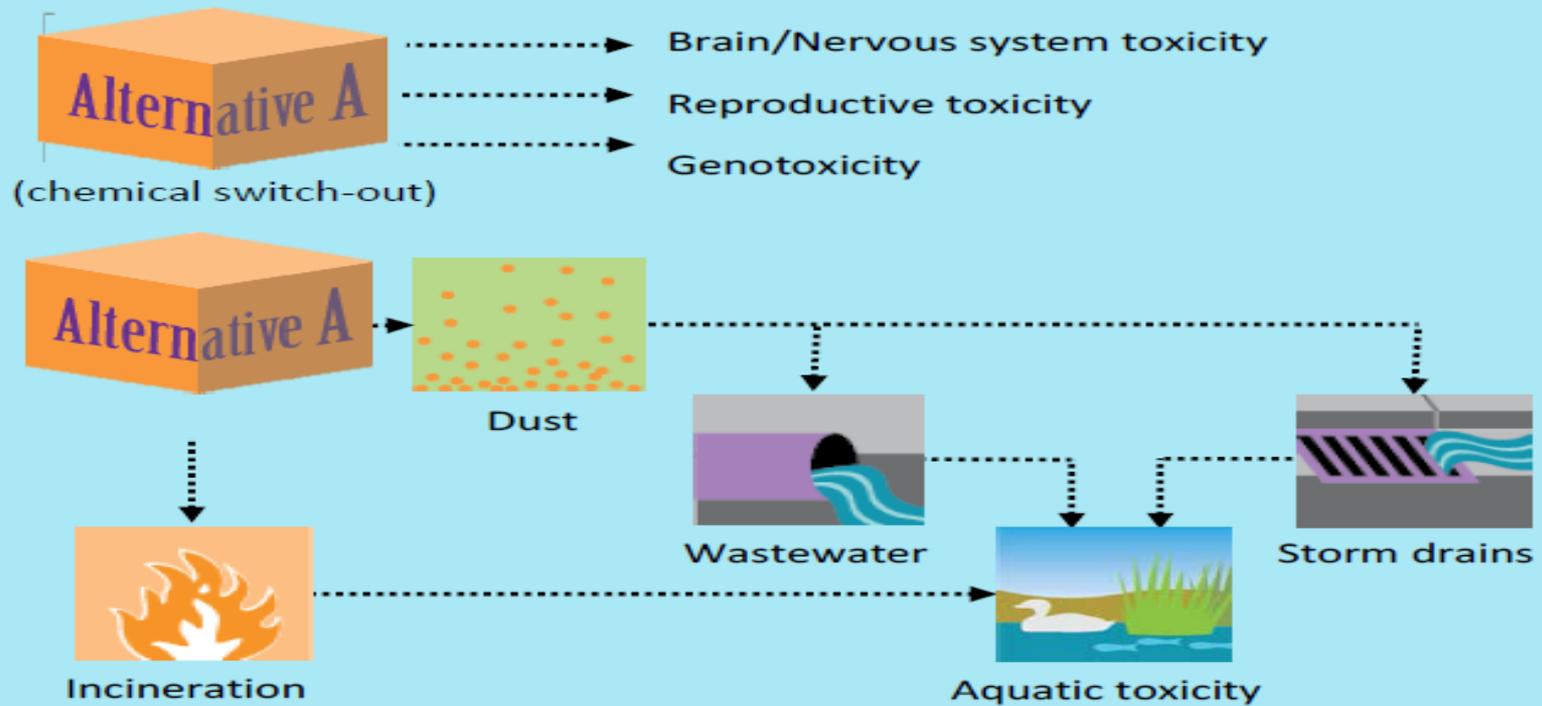
Iterative Process

Exposure Pathways

Conceptual Model

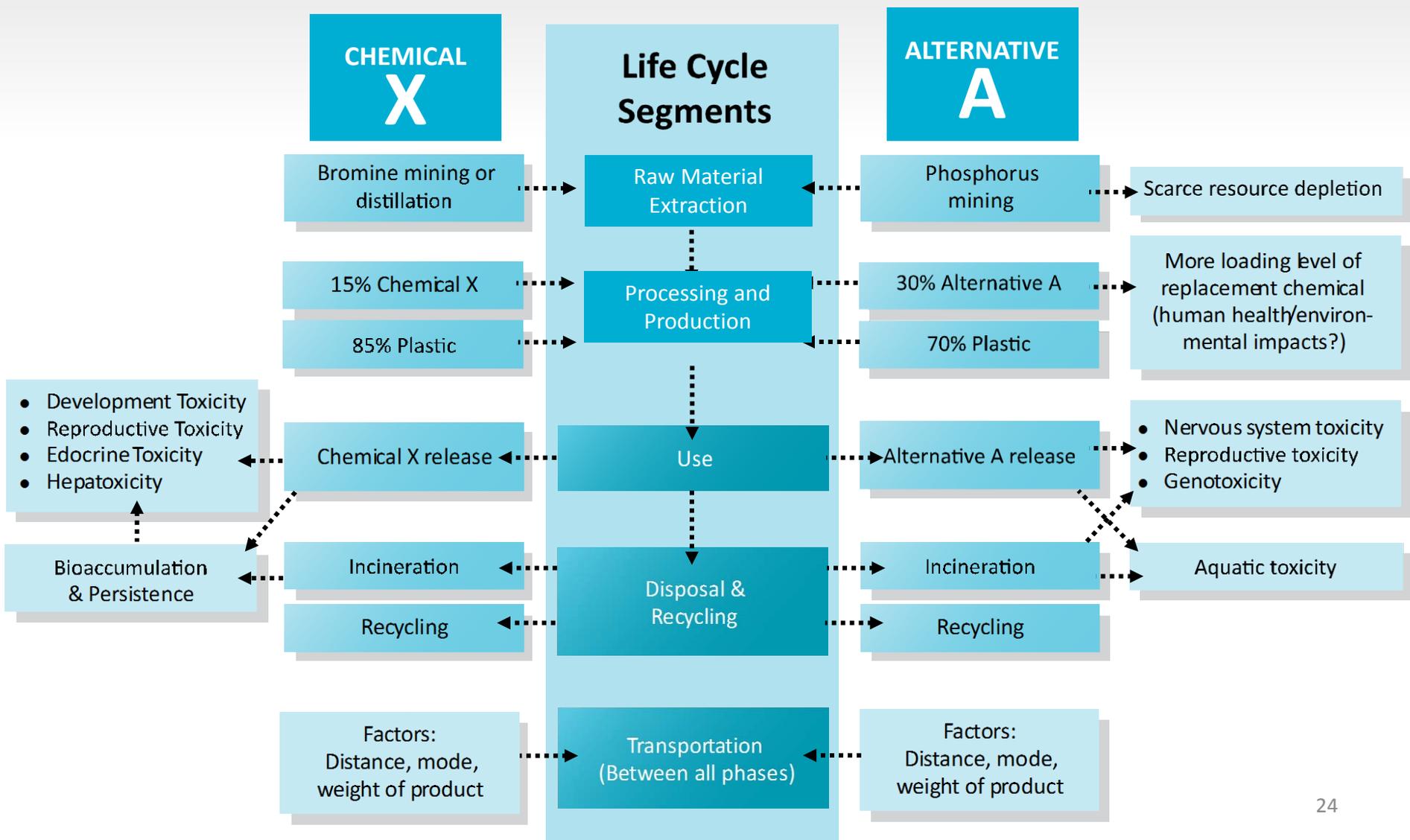


Conceptual Model – Identification of Relevant Factors



A conceptual model
for Alternative A





Example for Displaying Results of Life Cycle Screening Analysis

Chemical Name	Raw material extraction	Resource inputs and consumption	Intermediate material processes	Manufacture	Packaging	Transportation	Distribution	Use	Operation and maintenance	Waste generation and management	Reuse and recycling	EOL disposal
Public health impact												
Air quality												
Soil quality												
Water quality												
Ecological Impacts												
Waste and EOL												



Chapter 4: Impact Assessments

Data Gathering

Comparative Tools

Appendix: Tools and Methods for Chemical
Hazard Assessment



Chapter 5: Screening Alternatives

Screening Approaches

- Compare impacts
- Identify trade-offs
- Reserve marginal alternatives
- Document rationale



Example of Comparison Approach

	Group I Human					Group II & II Human								Ecotox		Fate		Physical	
	C	M	R	D	E	AT	ST	N	SnS	SnR	IrS	IrE	AA	CA	P	B	RX	F	
							Single	repeat	Single	repeat									
Chemical X	Red				Yellow	Yellow	Dark Red	Red	Dark Red	Dark Red	Green		Red	Red	Yellow	Green	Dark Red	Green	Green
Alternative 1	Green		Green	Yellow		Yellow	Green	Green	Yellow	Red	Red	Green	Green	Red	Green	Green	Green	Green	Green
Alternative 2	Green		Green	Green		Green	Green	Red		Green	Green		Yellow	Red	Green	Green	Green	Green	Yellow
Alternative 3	Green		Green	Green		Green	Green	Green	Green	Green	Green		Yellow	Yellow	Green	Green	Green	Green	Yellow
Alternative 4	Green	Yellow	Yellow	Yellow		Green	Yellow	Yellow	Yellow	Green		Yellow	Red	Green	Green	Yellow	Green	Green	Red
Alternative 5	Green	Green	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow		Green		Yellow	Green	Green	Green	Green	Yellow	Green



Summary

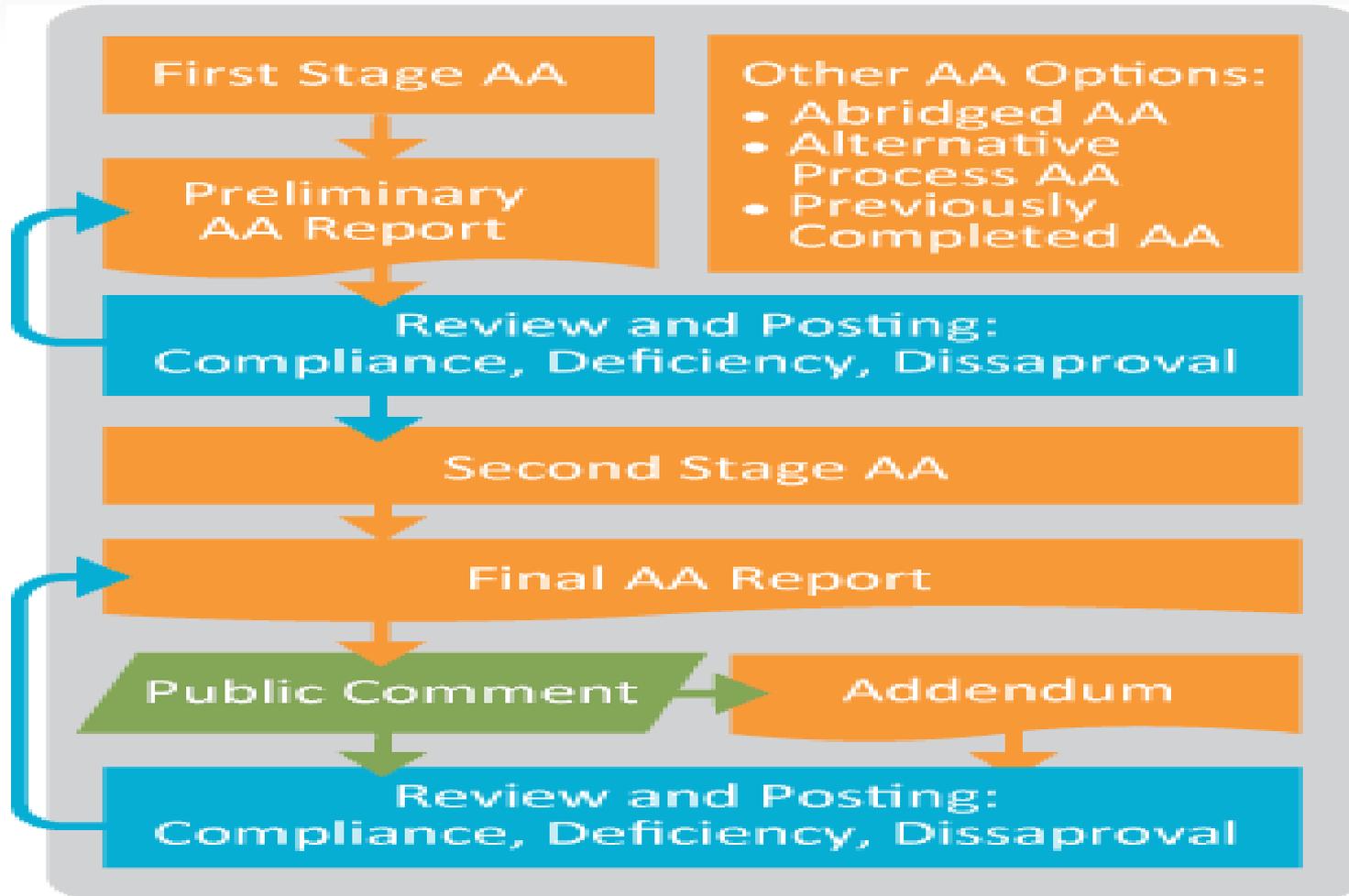
Menu of Approaches

Iterative

Preliminary AA Report and Work Plan



Summary...the AA Process



Confidential Business Information

Two Copies of AA Report:

- Redacted
- Full (including CBI)

Submitted Through CalSAFER Secured System

Supporting information

CBI claims subject to review



DTSC wants your feedback

Guide is for you!

Tools, approaches, methods, data sources

Additional examples

Clarity

Comments through CalSAFER by November 16, 2015

<https://calsafes.dtsc.ca.gov/Comments/PackageDetail.aspx?PID=11741>



Next Steps

Draft Stage 2 AA:

Spring 2016

Webinar for Draft Stage 2 AA

TBD



Thank You!

