

GMA



Representing the Makers of the World's Favorite Food, Beverage and Consumer Products

Industry's Product R&D Process, **Alternatives Analysis!**

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www.gmaonline.org

Purpose of AA Webinar Series

Share industry best practices to:

- “ Facilitate understanding of the product R&D process and industry practices;
- “ Demonstrate how safety is core to product design, protecting human health and the environment;
- “ An effective AA framework should leverage concepts from existing industry best practices;
- “ Identify: commonalities in proposals, working assumptions, points of departure.

Who We Are



The Association of Food, Beverage
and Consumer Products Companies



Toy Industry Association, Inc.

www.toyinfo.org



GMA



Consumer Specialty Products Association



american cleaning institute™
for better living

www.gmaonline.org

Overarching Policy Goal

Green Chemistry objectives are to:

- “ SIGNIFICANTLY reduce adverse health and environmental impacts of chemicals used in commerce by encouraging the redesign of consumer **products**, manufacturing **processes**, and **approaches**, an alternatives assessment

Industry objectives are:

- “ To identify, analyze, and implement potential improvements to an existing product, an alternatives analysis

Washington/TAAG Green Chemistry Initiative

AA Component/Modules

1. Initial Evaluation
2. Pre-screening evaluation
3. Identification of alternatives
4. Hazard evaluation
5. Performance
6. Commercially availability and cost effectiveness
7. Exposure considerations
8. Stakeholder Involvement
9. Social, worker and environmental justice and other related considerations
10. Material flow assessment
11. Life cycle considerations/avoiding shifting risks
12. Decision making methodology

What you will hear ...

- “ **AA is fundamental to product R&D process and design:**
- “ **Product safety is always a given**
- “ **Consumer preference drives innovation**
 - “ Our products must meet consumer need (accessibility to safe, quality and affordable products);
 - “ Our products improve quality of life
- “ **Product optimization process is iterative, complex, multi-faceted, and done case-by-case.**

What you will hear ...

Key factors always considered in the product R&D/AA process:

“Consumer preference/acceptance

“Safety (health + environment)

“Product performance

“Lifecycle considerations

“Manufacturability (Availability, Capability, Compliance)

Multi-Factorial Evaluation Matrix

Key Criteria

Companies consider ALL of these factors within the Product R&D process

(i) Safety (human and environmental)

- Public Health Impacts, incl. sensitive subpopulations
- Environmental Impacts
 - Water quality impacts
 - Air emissions
 - GHG emissions
 - Waste/End-of-Life Disposal
- Toxicological endpoints
- Exposure Considerations
- Physicochemical properties

(ii) Performance and Value

- Product function/performance (to include compatibility)
- Useful Life
- Economic impact
- Consumer Acceptance

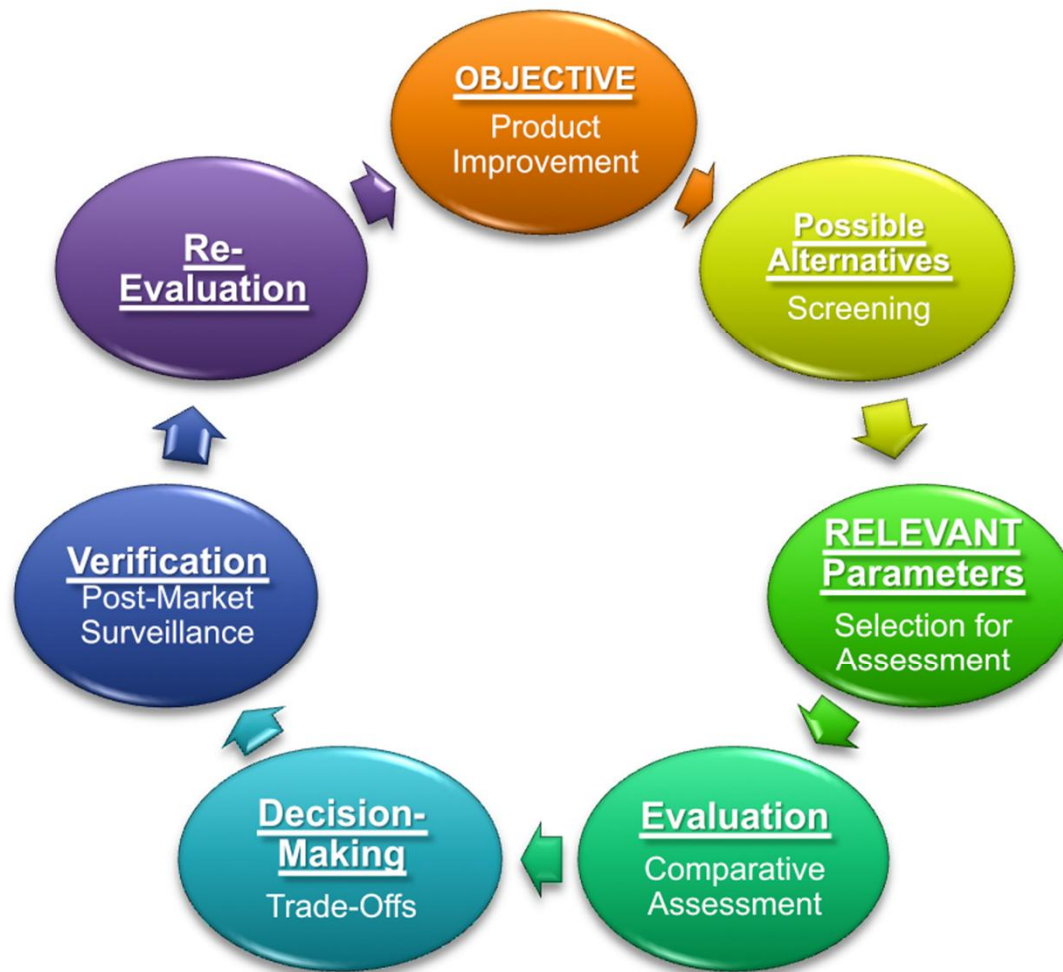
(iii) Lifecycle/Resource utilization

- Material/Resource Consumption
- Water conservation
- Energy inputs (Production, In-use, and transportation)
- Energy efficiency

(iv) Other

- Availability/sourcing
- Manufacturing capability
- Regulatory compliance
- Stakeholder Communication

Product R&D Process – Continuous Improvement



Overview/Agenda

Webinar 1 – Personal Care Product:

- “ Product Safety, Material R&D Assessments
- “ Case Studies
- “ Lifecycle Thinking
- “ Product Stewardship
- “ Innovation, Trade-offs and Avoiding Unintended Consequences

Webinar 2 – Household Detergents + Assembled Products:

- “ Product Safety, Material R&D Assessment
- “ Case Study
- “ Toys

GMA Webinar 3 – TAAG Team + Dialogue



Let's Begin!

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