Interstate Chemicals Clearinghouse Alternatives Assessment Guide



Alex Stone Guide Team Lead

BizNGO Webinar 10 April 2014

PROTECT YOUR CHILDREN

Against Disease-Carrying Insects



KILLS FLIES, MOSQUITOS, ANT

... as well as moths, bodbugs, sliverfish and oth household posts after contact!

MEDICAL SCIENCE KNOWS many common insects bre in filth, live in filth and carry disease. Science also re ognizes the dangers that are present when these diseas carrying insects invade the home. Actual tests ha proved that one fly can carry as many as 6,600,000 ba teria! Imagine the health hazard - especially to ch dren-from flies seriously suspected of transmitting su diseases as scarlet fever, measles, typhoid, diarrhea . even dread polio! Some types of mosquitos carry mala: and yellow fever. And any mosquito bite is painful a easily infected when scratched.

HON-HAZARDOUS to children or adults, to pets or cloth Certified to be absolutely safe for home use. Tested a commended by Parents' Magazine.

GUARANTEED effective against disease-carrying insefor I year. Actual tests have proven the insect-killi properties still effective after 2 years of use.

NO SPRAYS! NO LIQUIDS! NO POWDERS! So convenie so safe because the DDT is fixed to the paper. It ca rub off!

BEAUTIFUL! "Jack and Jill" or "Disney Favorites"-g new patterns that protect as they beautify a child's roo DOT CEILING PAPERS, TOO! Extra protection for your ch dren's room -- for every other room in the house. Cho

DOOH-LOOK

Why an AA Guide?

Non-hazardous to children or adults, to pets or cloth. Certified to be absolutely safe for home use. Tested and recommended by Parents' Magazine.



Anyone can put Trimz Wallpaper up without help or previous experience. Millions have done it-proved it's quick, clean, easy! Nothing to get ready-no tools, paste or muss. Just cut strips to fit, dip in water and hang. It's dry in 20 minutes! Guaranteed to stick-guaranteed to please or money back. And so inexpensive! You can protect your child for \$8 to \$12depending on size of room.

Trimz DDT Children's Room Wallpaper, Trimz DDT Cedar Closet Wallpaper now available at Department, Chain, Hard-

Many beautiful new patterns also available in regular Trimz Rendy-



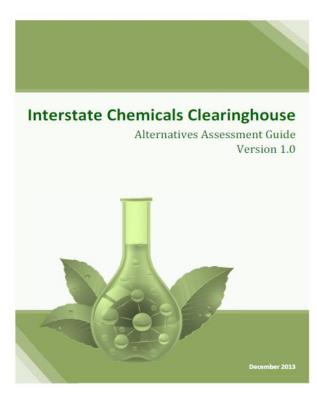


Oooh-Look Donald Duck!

Golly-There's Pluto too!

Alternatives Assessment Background

- \$150K EPA seed funding to develop AA guide
- Eight IC2 member states (CA, CT, MA, MI, MN,
 NY, OR, WA) worked together for over two years
- Completed Guide released on January 8th
- Included 2 response-tocomment documents
 - 1. Word summary
 - Excel spreadsheet with all comments and grouping



IC2 AA Guide

Pollution Prevention

Mercury

IMERC

Solid Waste Hazardous Wa Waste Cl

Waste Site Cleanup

ERP

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ALTERNATIVES ASSESSMENT GUIDE

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Pollution Prevention & Sustainability IC2 Guidance for Alternatives Assessment and Risk Reduction

IC2 Alternatives Assessment Guide

On January 8, 2014, the Interstate Chemicals Clearinghouse (IC2) and participating states announced the release of the <u>IC2 Alternatives Assessment Guide (Guide)</u>. The Guide is the product of 20 months of effort by IC2's members.

An alternatives assessment is a set of tools that manufacturers, product designers, businesses, governments, and other interested parties can use to make better, more informed decisions about the use of toxic chemicals in their products or processes. The IC2 collaborated with businesses and non-governmental organizations on the development of the *Guide*.

In addition to the *Guide*, the IC2 is releasing two Response-to-Comment (RTC) documents. The <u>summary RTC document</u> groups comments received and documents how the *Guide* was either updated or not altered based upon input received. The <u>detailed RTC document</u> contains a response to each individual comment.

The responses in both RTC documents are identical; the full comments are available only in the detailed document. Comments received throughout the development of the *Guide* are <u>available</u>

The IC2 understands the benefits of consistency in alternatives assessments but recognizes that one approach will not work in all situations. The *Guide* was designed to be very comprehensive and includes three ways in which an alternatives assessment can be conducted.

The Guide was created with an extensive stakeholder involvement process, including:

- · Initial scoping of the project
- · Release of the modules as they were completed for review and comment
- · Three industry workshops
- · Two free webinars
- A 60-day comment period

All comments were summarized in the RTC documents.

For questions concerning the Guide, contact Dr. Alex Stone, Team Lead, (360) 407-6758; alex.stone@ecv.wa.gov.



Interstate Chemicals Clearinghouse

Alternatives Assessment Guide Response to Comments

December 2013

http://www.newmoa.org/prevention/ic2/aaguidance.cfm

Guidance Approach

Guidance based upon reducing risk

Risk ≈ Function (<u>Hazard</u>, <u>Exposure</u>)

Reducing risk is a two step process:

- 1. Identify chemicals with lowest possible hazard
- 2. Evaluate exposure of chemicals with lowest hazard

Select alternative that is both lowest hazard and lowest exposure potential

Using an exposure evaluation alone as the rationale for continued use of toxic chemicals should be avoided as both steps are critical



Guide Components

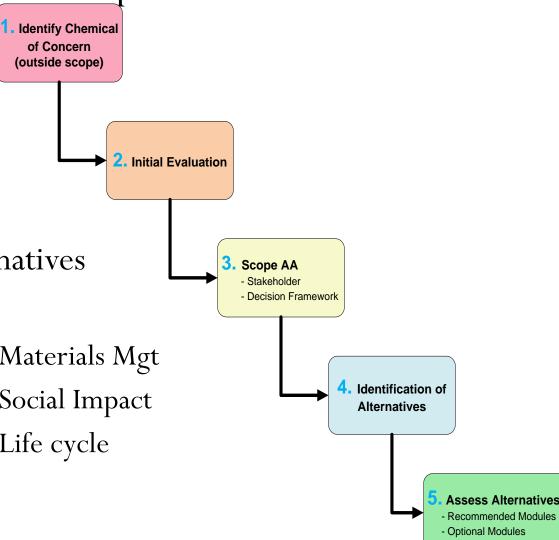
AA consists of five distinct steps

- 1. Identify COCs
- 2. Initial Evaluation
- 3. Scoping
 - Stakeholder
 - Decision Framework
- 4. Identification of Alternatives
- 5. Assess Alternatives
 - Hazard

Materials Mgt

Performance

- Social Impact
- Cost & Availability Life cycle
- Exposure



Guide Components (cont.)

1. Identify COCs



- Select chemical or process to be assessed in AA
- Although important, considered outside Guide scope
- Many ways COCs can be selected
 - Consumer concerns (BPA, chlorinated phosphate flame retardants)
 - Political concerns (PBDE flame retardants)
 - Business initiatives (regulatory avoidance, getting ahead of regulatory process)
 - Etc.

Guide Components (cont.)

2. Initial Evaluation:



- Answers questions: 'Is an AA necessary?' 'Can the chemical be eliminated without affecting the product?'
- If yes, eliminate chemical and avoid the need for an AA

3. Scoping:

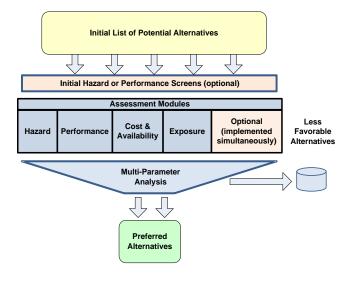
- Stakeholder
 - Decide what level of stakeholder involvement is appropriate
 - Ranges from internal company to complete stakeholder involvement
- Decision Framework
 - Decide which of the three Frameworks is appropriate

Decision Frameworks

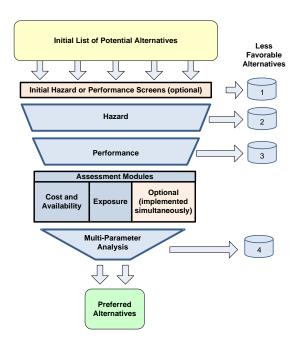
Sequential

Initial List of Potential Alternatives Less Favorable Alternatives Initial Hazard or Performance Screens (optional) Hazard 2 Performance 3 Cost and Availability 4 Exposure 5 Additional Modules (optional) Preferred Alternatives

Simultaneous



Hybrid



Guide Components (cont.)

4. Identification of Alternatives

- Select alternatives for assessment
- Cast very wide net to include not only replacement and reformulation but redesign to eliminate chemical of

5. Assess Alternatives:

concern

- Decide modules above minimum recommended
- Decide which level within each module is appropriate
- Depending upon Framework selected, further decisions needed:
 - Decision logic included if using Sequential Framework
 - For Hybrid and Simultaneous Frameworks, decide on how to make decisions (Decision Methodology)

Example Module: Performance

- Based upon work conducted by the Toxics Use Reduction Institute (TURI) at the University of Massachusetts-Lowell and the European Chemicals Agency (ECHA)
- Ranges from a simple qualitative to a validated quantitative evaluation
- Consists of 3 Levels with increasing complexity and data requirements



Performance Module (cont.)

Each level compares performance using:

<u>Level 1</u>: Qualitative information readily available from manufacturers and other easily-accessible sources

<u>Level 2</u>: Quantitative information of existing data reviewed by technical experts

<u>Level 3</u>: Quantitative information based upon results of specified tests with results reviewed and validated by technical experts



Guide Components (cont.)

- 5. Assess Alternatives: (cont.)
 - Group 1: Minimum recommended modules and order
 - Hazard
 - Performance
 - Cost and Availability
 - Exposure
 - Group 2: Additional modules
 - Materials management
 - Social impact
 - Life cycle assessment



How may Guide be used?

- By state and other governments to decide what comprises an adequate AA
 - Individual states may recommend or require different components of Guide. All will have same foundation.
 - Bring consistency among IC2 states conducting AAs.
- On a voluntary basis with businesses as part of pollution prevention efforts.
- Scientific Groups to support AA work
- By businesses to determine what constitutes an adequate AA for their product and process under evaluation while meeting company goals and objectives



How may Guide be used? (cont.)

- By Federal Government?
 - Support Federal efforts on AAs (DfE)
 - Emphasize importance of safer products
 (DfE safer products and green list)



- Emphasize importance of worker health and safety component (OSHA)
- Coordinate activities with state actions
- Support & provide assistance to states conducting AAs



Guide Evaluation

- \$ from EPA to evaluate Guide
- Request for Proposals (RFP) issued
 March 8th
- Two months to review, ask questions and provide proposals
- Contract to be finalized by end of May
- -Six months for completion of 5 major deliverables
- -Completion December 2014



Outline of Evaluation

Five primary actions

- 1. Create common data set:
 - Using EPA and CA work on copper boat paint alternatives, collate data on performance, cost and exposure
 - Conduct Chemical Hazard Assessment (CHA) of alternatives
 - Prioritize using combination of List Translator, QCAT & GreenScreen
 - CHAs will become part of common data set
 - Provide common data set
 - Using recommended 4 modules, order and minimum levels

Outline of Evaluation

Five primary actions (cont.)

- 2. Conduct AA using data set & Sequential Framework
- 3. Conduct AA using data set & Simultaneous Framework
- 4. Conduct AA using data set & Hybrid Framework
- 5. Write report summarizing results of work & conclusions reached

Note: Three separate groups should work independently on AAs so results from one AA does not affect any other



What the evaluation **WILL** do:

- Determine if there is sufficient guidance in
 Guide to conduct AAs using three frameworks
- Provide input on what sections if any need additional information
- Determine if the Guide is 'user-friendly' for wide range of intended users
- Compare results to see if the same conclusion is reached from all three Frameworks and, if not, suggest reasons for differences
- Provide information on alternatives to copper boat paint that can be used to start more complete AA including stakeholder involvement



What the evaluation **WILL NOT** do:

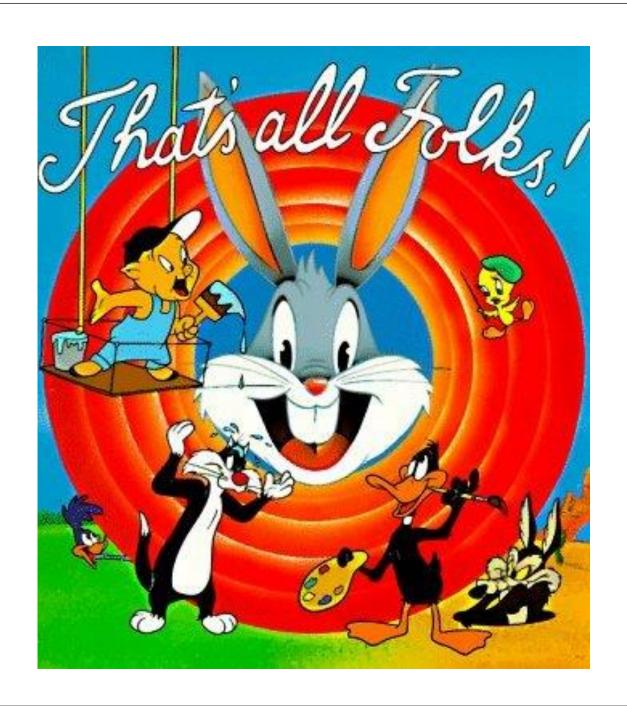
- Change technical content or structure of the Guide
- Although information on alternatives to copper boat paint are informative, objective is to evaluate usability of Guide, not to conduct an AA on copper boat paint
- Initiate further stakeholder input into content or structure of the Guide



Further Activities

Create WA specific Guide:

- Establishing Advisory Committee to assist
- WA Guide will be subset of IC2 AA Guide
- No changes to content or structure of IC2 AA
 Guide will be considered
- Stakeholders are solely advisory
- Final decisions on content of WA specific Guide will be made by Ecology



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