“Air Fresheners,”
Indoor Air Quality & Federal Policy

Ralph Scott
Alliance for Healthy Homes
September 16, 2008
Overview

- “Air fresheners” as consumer products
- Health issues
- Policy issues
- Citizen petition
- Companies’ response
- Suit vs. EPA to get info from companies
“Air fresheners” are everywhere

Almost every American is exposed to air fresheners

- Used in 75% of U.S. homes; use is growing
- Common in public bathrooms
- Offices, stores, restaurants use them, too
- Often, the public is unaware of the nature, extent, and consequences of the exposure
Broad range of product types

- Traditional sprays
- Continuous release (outlet- and battery-operated)
- Solid gel dispensers
- Hanging car air fresheners
- Potpourri
“Air fresheners” are big business

- US sales (excluding home fragrance products such as incense and scented candles): about $1.7 billion in 2007
- $600 million increase since 2003
What are “air fresheners” good for?

FMA says:

Fragrances contribute to our:

- “Individuality”
- “Self-esteem”
- “Personal hygiene”
We say... Nothing!

- Fail to remove contaminants
- They add toxic chemicals
- Intended to be inhaled by people
Even neglecting toxic chemical ingredients, they do obvious harm.

Mask odors that indicate unhealthful housing conditions:
- Mold (and hidden water leaks)
- Sewage backups and sewer gas
- Gas leaks
- Drifting tobacco smoke
Potentially hazardous chemicals (we know of)

**VOCs** (including formaldehyde & phthalates)
- Lung irritants
- Associated with asthma attacks and migraines
- Formaldehyde is a lung irritant and probable carcinogen
- Some phthalates are endocrine disrupters
Respiratory issues - 2004 Study

- 29.7% of those with asthma said air fresheners caused breathing difficulties
- 37.2% found scented products irritating

Serious exposures

- Amer. Assoc. of Poison Control Centers documented 14,000+ calls involving air freshener exposure in 2005
- 2,500+ exposures resulted in injuries of some type

NRDC Study – “Clearing the Air: Hidden Hazards of Air Fresheners”

- September 2007
- Independent testing of 14 common air fresheners
- None listed phthalates as ingredients
- Some labeled “all natural” or “unscented”
- 12 of 14 (86%) contained phthalates
- Phthalates are known to cause hormonal abnormalities, birth defects, reproductive problems
NRDC Study – Types of phthalates found in 12 common air fresheners

<table>
<thead>
<tr>
<th>Phthalate</th>
<th>Effect</th>
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<tbody>
<tr>
<td>Di-ethyl Phthalate (DEP)</td>
<td>Changes in hormone levels and genital development</td>
</tr>
<tr>
<td>Di-n-butyl Phthalate (DBP)</td>
<td>Called reproductive toxicant by National Toxicology Program and State of CA Causes changes in genital development</td>
</tr>
<tr>
<td>Di-isobutyl Phthalate (DIBP)</td>
<td>Metabolites associated with changes in male genital development</td>
</tr>
<tr>
<td>Di-methyl Phthalate (DMP)</td>
<td>Inconclusive evidence of reproductive toxicity in animal studies</td>
</tr>
<tr>
<td>Di-isohexyl Phthalate (DIHP)</td>
<td>Limited testing has shown it’s probably a developmental and reproductive toxicant</td>
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Source: Clearing the Air: Hidden Hazards of Air Fresheners (NRDC, 2007)
Virtually unregulated

- Makers of air fresheners don’t have to reveal ingredients
- They haven’t done it voluntarily
- Chemicals and their concentrations have been secrets
What’s in a name?

“Air freshener”
Manufacturers reinforce concept with ads implying they magically clean air
They simply mask odors with chemicals

You can’t smell sewage and mold, but you’re still being exposed
To fight back...

Let’s call them what they really are:

- Chemical bad smell maskers
- Chemical odor dispensers
- Chemical air soilers
- Chemical air spoilers
Petition to EPA and CPSC

- September 2007
- NRDC, Sierra Club, National Center for Healthy Housing, Alliance for Healthy Homes
Asked CPSC to use Federal Hazardous Substances Act to...

- Ban air fresheners containing chemicals known to cause cancer or reproductive toxicity
- Require all air fresheners to be labeled with full list of ingredients

CPSC rejected our petition because they said we didn’t ID the toxic chemicals of concern to us with enough specificity
Petition asked EPA to use TSCA to force manufacturers to…

- Provide consumer reports of health problems from air fresheners to EPA
- Submit existing health and safety studies
- Test for potential harm to people’s respiratory systems
- Label products containing phthalates
EPA’s response (Dec. 2007)

Denied our petition, too, but...

- Asked 7 largest manufacturers to voluntarily submit product ingredients, range of concentrations for each chemical, each chemical’s function, and total annual amount used
- Set Mar. 31, 2008 deadline
Our decision about suing EPA

Timing

- Our legal deadline for filing suit came before the deadline EPA gave companies to submit data
- Thus, we decided to sue but delay serving EPA (to save agency from unnecessary work if companies’ responses were satisfactory)
Our goals

- EPA obtain info on ingredients (as a basis for additional regulatory action)
- As much as possible of the info be made public
Companies’ response

- Offered to provide EPA aggregated info on ingredients and concentrations to “protect confidential business information”
- CSPA would aggregate non-fragrance ingredients
- FMA would aggregate fragrance data
- Only chemicals with >0.1% concentration
Delaying tactics

- CSPA requested 60 day extension
- EPA granted CSPA 45 days (to May 15, 2008)
- On May 15, FMA said they needed until Oct. 1, 2008, to provide fragrance data
May 15, 2008 data submission

- No info on chemicals below 0.1% provided to EPA
- Public version severely redacted
- Fragrance data delayed until Oct. 1
- Fragrance concentrations would not be given to EPA

We decide to serve EPA with suit
Public data submission

Sample page from CSPA’s May 15 response – public version

Want some info to go with those redactions?
Public report is virtually useless

- Water is a non-secret ingredient, but how much?
- Cardboard is a non-secret ingredient
- 27 of the 100 ingredients are redacted
- Total tonnage provided for only 11 of the 100 ingredients
Some info was provided

Companies say…

- Phthalates not intentionally added among the non-fragrance ingredients
- They believe only one phthalate, DEP, is added as a fragrance ingredient
- Formaldehyde is an ingredient
- Benzene, styrene or toluene aren’t added above 0.1% as non-fragrance ingredients
Status of lawsuit

- Pre-trial stage – discovery
- Companies & trade associations haven’t intervened and probably won’t
The future

- Still waiting for fragrance ingredients to be submitted to EPA
- Will EPA seek to avoid trial by requiring companies to provide & reveal more info?
- We believe ingredient info can be made public in an aggregated format
For more information

- Visit EPA’s web site at:
  www.epa.gov/oppt/chemtest/pubs/petitions.htm

- Visit NRDC’s web site at:
  www.nrdc.org/health/home/airfresheners/airfresheners.pdf

- Contact me at:
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Lead In Consumer Goods

Screening Products with the Thermo Scientific NITON® XL3 for Lead and other Heavy Metals

Presented by Bill Radosevich
A sneaker manufacturer recalled 510,000 charms when a 4 year old died from lead poisoning after swallowing one in 2006.

- The charm contained more than 94% lead
- Lead professionals and regulatory agencies immediately began testing similar charms
- Some contained lead, some did not
EIBLL linked to consumer goods
Consumer Reports, December 2007
Scope of Problem

1. Yellow
2. Orange
3. Brown
4. White
5. Blue
6. Black
7. Black
Using Handheld or test stand
Small Spot Example

# 2 Plastic Mode
Time 8.6 sec
Non-PVC Type
Fail
Doll-237

<table>
<thead>
<tr>
<th>Ele</th>
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<th>+/-</th>
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Below LOD List

[Main]

Download to C:Program Files\ANTON\NDT\Data255 screen capture 20071225.png
September 19:
Rep. Ed Markey Brings NITON Analyzer to Toy Safety Hearing; Video Viewed More Than 600 Times on YouTube.com

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