U.S. State and Market Leadership on Food Contact Chemicals

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Environmental Health Strategy Center

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Summary of the Case

- The U.S. federal safety system is badly broken
- Consider, per- and polyfluoroalkyl substances (PFAS) and *ortho*-phthalates, for example

Three sets of actors are closing the gap in U.S. federal leadership and will increasingly drive positive change:
- Food industry market leaders
- Third-party standard-setting bodies
- State and local public policy makers
The U.S. Food-Contact Chemical Safety System is Badly Broken

Fixing the Oversight of Chemicals Added to Our Food: Findings and Recommendations of Pew’s Assessment of the U.S. Food Additives Program (2013)

Trasande L, Shaffer RM, Sathyanarayana S; AAP COUNCIL ON ENVIRONMENTAL HEALTH. Food Additives and Child Health. *Pediatrics*. 2018; 142(2)

- ~ 5,000 indirect food additives not safety assessed in decades
- ~ 1,000 self-certified by industry as Generally Recognized as Safe

- Close the GRAS loophole
- Modernize FDA’s food additive science
- Ensure that existing additives are safe
- Establish a fee-based funding program to pay for the review process

[www.ourhealthyfuture.org](http://www.ourhealthyfuture.org)
PFAS, the Forever Chemicals, in Food

LONG CHAIN PFAS
- Legacy reservoir
- Precursors in use
- Imports from China

SHORT CHAIN PFAS
- Still widely used
- Regrettably substituted

PMTs: very
- Persistent
- Mobile
- Toxic

Graphic by Toxic-Free Future
**ortho-Phthalates**
the Everywhere Chemicals

- Demonstrable health risks
- EDCs: low-dose concern
- High production volume & widespread use, still

### US Food Contact Use

<table>
<thead>
<tr>
<th>Item</th>
<th>Test + (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyor Belts</td>
<td>100</td>
</tr>
<tr>
<td>Cap Gaskets – Bottle Caps</td>
<td>60</td>
</tr>
<tr>
<td>Teat Cup Liners (Inflations)</td>
<td>50</td>
</tr>
<tr>
<td>Plastic Tubing</td>
<td>80 / 9</td>
</tr>
<tr>
<td>Cap Gaskets – Jar Lids</td>
<td>17</td>
</tr>
<tr>
<td>Inks, Adhesives &amp; Coatings</td>
<td>?</td>
</tr>
<tr>
<td>Film Wrap (Cling Film)</td>
<td>0</td>
</tr>
</tbody>
</table>

*Source: Carlos et al. (2018), Pure Strategies /Ecology Center (2018)*
The Chemicals in Your Mac and Cheese

Analysis by VITO (Flemish Institute for Technological Research) commissioned by U.S. NGOs

The New York Times

PHTHALATES
12 July 2017

Table 1. Macaroni & Cheese Powder Had Highest Phthalates of Products Tested

<table>
<thead>
<tr>
<th>Products Tested</th>
<th>Product Description</th>
<th>Number of Varieties Tested</th>
<th>Concentration of TOTAL Phthalates</th>
<th>Average and Range, in µg/kg or parts per billion (ppb)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>In FAT (measured)</td>
<td>In PRODUCT (calculated)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Avg.</td>
<td>Low</td>
</tr>
<tr>
<td>Cheese Powder</td>
<td>Macaroni and Cheese, dry mix</td>
<td>10</td>
<td>940</td>
<td>365</td>
</tr>
<tr>
<td>Processed Cheese</td>
<td>Slices</td>
<td>5</td>
<td>569</td>
<td>180</td>
</tr>
<tr>
<td>Natural Cheese</td>
<td>Hard, Shredded, String &amp; Cottage</td>
<td>15</td>
<td>216</td>
<td>&lt; 55 *</td>
</tr>
</tbody>
</table>
# Market Leadership – PFAS

## TABLE 1: RESULTS OF SCREENING RETAILER FOOD-CONTACT MATERIALS FOR LIKELY PFAS TREATMENT

<table>
<thead>
<tr>
<th>ITEM CATEGORY</th>
<th>Ahold Delhaize</th>
<th>Albertsons</th>
<th>Kroger</th>
<th>Trader Joe’s</th>
<th>Whole Foods (Amazon)</th>
<th>TOTAL BY PRODUCT CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-out container</td>
<td>0/2</td>
<td>1/1</td>
<td></td>
<td></td>
<td>4/5</td>
<td>5/8</td>
</tr>
<tr>
<td>Bakery or deli paper</td>
<td>1/6</td>
<td>1/7</td>
<td>1/11</td>
<td>0/6</td>
<td>1/8</td>
<td>4/38</td>
</tr>
<tr>
<td>Single-use plate</td>
<td>1/3</td>
<td>0/2</td>
<td>0/1</td>
<td>0/1</td>
<td>1/7</td>
<td></td>
</tr>
<tr>
<td>Tray for cook-at-home food</td>
<td>0/1</td>
<td>0/1</td>
<td>0/1</td>
<td>0/3</td>
<td>0/2</td>
<td>0/8</td>
</tr>
<tr>
<td>Baking or cooking supplies</td>
<td>0/4</td>
<td>0/5</td>
<td>0/4</td>
<td>0/2</td>
<td>0/2</td>
<td>0/17</td>
</tr>
<tr>
<td>TOTAL BY RETAILER</td>
<td>2/14</td>
<td>1/17</td>
<td>2/18</td>
<td>0/12</td>
<td>5/17</td>
<td>10/78</td>
</tr>
</tbody>
</table>
Corporate Chemical Policies

Announced a new sustainable chemistry commitment in Sept. 2019:

**Restricts Chemicals of Concern**
- PFAS
- Bisphenols
- Phthalates
- and more

**Scope and Verification**
- Applies to private brand products, and their **food packaging**
- Will expand supplier testing in 2020
- Will participate in Chemical Footprint Project to track progress

www.ourhealthyfuture.org
Vinyl plastic gloves dominate the fast food restaurant market

<table>
<thead>
<tr>
<th>Restaurant Glove Material</th>
<th>Gloves Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl</td>
<td>40 (63%)</td>
</tr>
<tr>
<td>Poly</td>
<td>20 (32%)</td>
</tr>
<tr>
<td>Nitrile</td>
<td>3 (5%)</td>
</tr>
</tbody>
</table>

Vinyl gloves were collected from 38 of 56 locations (68%) of 15 restaurant chains

**PHTHALATES** still used in some gloves at some stores of McDonalds, Wendy’s, and Burger King

**Market Leaders** switched to polyethylene gloves with no plasticizer chemicals e.g.

- DEHT
- DINP
- DIDP
- DPHP
- DEHP

One-third of U.S. distributors sold some vinyl gloves with phthalates

<table>
<thead>
<tr>
<th>Vinyl Glove Distributors</th>
<th>Vinyl Gloves with Phthalates</th>
<th>Vinyl Gloves Tested</th>
<th># of Foreign Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Handler / Bunzl</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Inteplast Group</td>
<td>2</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Omar</td>
<td>2</td>
<td>8</td>
<td>n/a</td>
</tr>
<tr>
<td>Akers Industries</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Gordon Food Service</td>
<td>1</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>Prime Source</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>AMMEX</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>511 Foodservice</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>AmerCareRoyal</td>
<td>1</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Tronex Safety</td>
<td>1</td>
<td>10</td>
<td>n/a</td>
</tr>
<tr>
<td>22 Other Distributors</td>
<td>0</td>
<td>53</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>TOTAL: 32 Distributors</strong></td>
<td><strong>14</strong></td>
<td><strong>101</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>
Third-Party Standards - PFAS

- Leading certifier of compostable products and packaging in U.S.
- Promotes best practices for recovery and diversion of organic waste to composting

- By March 31, 2019, all companies must not exceed 100 parts per million total fluorine in certified products based on testing by an approved laboratory

- By December 31, 2019, certification of products containing any intentionally added fluorinated chemicals in formula will be discontinued, based on statements that must be submitted
Restricted Substances Lists (RSLs)

- A technical committee of the Institute of Packaging Professionals
- Raises food quality and safety awareness for food packaging industry

Published “Food Packaging Product Stewardship Considerations”

- Provides voluntary guidance to packaging suppliers on best practice
- Lists many chemical substances that either:
  - Should not be used intentionally (if suitable alternative exists) or
  - Should minimize use (no more than needed for technical effect)
- May go beyond regulatory requirements
- Being adapted by food brands and food supply chain managers

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In 2018, the Legislature passed the first law in the country to phase-out all PFAS in food packaging. By Jan. 1, 2020, the Department must determine whether safer alternatives to PFAS are available for specific applications. By Jan. 1, 2022, no person may use or sell food packaging with intentionally added PFAS if safer alternatives are deemed available for that application. If not yet available, the deadline is reset two years after finding that safer alternatives are available, with an annual review and report required.
Policy Leader - California

• The cities of San Francisco and Berkeley passed local laws to prohibit the sale and use of compostable food serviceware with PFAS

The State’s Safer Consumer Products Program adopted a 2018-2020 Priority Product Work Plan that:

* Commits to evaluating potential Priority Products and associated Candidate Chemicals in the FOOD PACKAGING category for possible regulatory action
Policy Leader – State of Maine (Pt. 1)

In June 2019, the Legislature passed a far-reaching Toxics in Food Packaging Act that will, by Jan. 1, 2022:

- Phase out PFAS in food packaging, if safe alternatives are found available
- Prohibit all ortho-phthalates in food packaging and food service gloves
- Applies to companies with more than $1 billion in national food sales, which provide most food eaten by Americans
- Amends an existing 1989 law that banned heavy metals in packaging
The law also enacts the first comprehensive food contact chemical policy at the U.S. state level that:

- Authorizes designation of up to ten **Priority Food Contact Chemicals** by chemical class
- Authorizes **use reporting** by manufacturers to disclose use of Priority Food Contact Chemicals
- Authorizes requiring manufacturers to conduct or pay for an **alternatives assessment**
- Authorizes a sales prohibition to **phase out** use of Priority Food Contact Chemicals in food packaging
Thank You!

"Dis-moi ce que tu manges, je te dirai ce que tu es."

Tell me what you eat and I will tell you what you are

Anthelme Brillat-Savarin, Physiologie du Gout, ou Meditations de Gastronomie Transcendante, 1826

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