The webinar will begin shortly.

Scope Overview
Per- and Polyfluoroalkyl Substances in Food Packaging Second Alternatives Assessment
May 25, 2021
Audio connection logistics

- For audio connection, we recommend using your computer speaker.
- If you are unable to join using computer audio, use “Call In” to access dial-in information.
- To open the audio options, select the three dots icon in the menu at the bottom of your screen.
Webinar logistics

• Raise your hand to provide verbal comments.
  • Dialing in via phone? Press *3 to raise your hand.

• Or, type questions and comments into the Q & A box.

• Send all technical difficulty issues to the host via the chat box.
  • To open the chat box, select the chat button at the lower right hand side of your screen.

• In the event of major technical difficulties, we will reschedule the webinar.
Scope Overview
Per- and Polyfluoroalkyl Substances in Food Packaging
Second Alternatives Assessment
May 25, 2021
Topics for today

1. Purpose of draft scope document
2. Information in the draft scope
   • Defining food packaging applications
   • Identifying candidate alternatives to PFAS in food packaging
   • Requesting new information
3. Ways to give feedback
4. Q&A
• Prohibits sale or distribution in Washington State of food packaging to which PFAS have been intentionally added in any amount
  • Prohibitions are by “specific food packaging application,” not all packaging generally
  • Prohibition is for PFAS as a class (defined as “a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom”)
Background: ESHB 2658 (2018)

• BEFORE restriction can take effect, Ecology must identify safer alternatives are available through an alternatives assessment (AA):
  • Must evaluate less toxic chemicals and nonchemical alternatives.
  • Must follow IC2 guidelines to evaluate potential alternatives.

• Submitted first set of findings to the Legislature in February 2021
  • Identified safer alternatives for:
    • Wraps and liners.
    • Plates.
    • Food boats.
    • Pizza boxes.

• We’re working on a second AA now.
What is the purpose of this document?

• “Scope-of-work” for the second AA

• It contains:
  • Definitions for food packaging applications:
    • Determines what types of food packaging we will look at in this AA
    • Determines what types of food packaging products might be subject to a ban
  • A list of candidate alternatives we plan to evaluate
    • Includes criteria for why we choose to evaluate certain alternatives
  • A list of what information we are currently looking for in this AA
Background—defining “specific food packaging applications”

• Definition of food package (from RCW 70A.222.010(1)):
  • Intended for direct food contact.
  • Comprised, in substantial part, of paper, paperboard, or other materials originally derived from plant fibers.

• PFAS added to food packaging provide oil, grease, and water resistance.
First AA—defining “specific food packaging applications”

• Defined applications based on specific examples of food packaging products.
• Focused on packaging used to hold, store, and transport freshly prepared food (e.g. a sandwich).
First AA: defining “specific food packaging applications”

- **Food contact paper** (two applications):
  - Wraps and liners.
  - Bags and sleeves.

- **Dinnerware** (four applications):
  - Plates.
  - Bowls.
  - Trays.
  - Food boats.

- **Take-out containers** (four applications):
  - Pizza boxes.
  - French fry cartons.
  - Clamshells.
  - Interlocking folded containers (also called food containers or pails).

- In the first AA, we found safer alternatives for:
  - Wraps and liners.
  - Plates.
  - Food boats.
  - Pizza boxes.
First AA: defining “specific food packaging applications”

• In the first AA, defined applications based on specific examples of food packaging products.

• Drawbacks:
  • Names used in packaging didn’t always align with our definitions.
  • Consumers use many products interchangeably.
Second AA: defining “specific food packaging applications”

• Still focused on holding, storing, and transporting freshly prepared food (e.g. a sandwich).

• Not including applications where we identified safer alternatives in first AA (such as wraps & liners or pizza boxes).

• Using the function of the packaging to define food packaging applications.
Defining “specific food packaging applications”

• **Closed containers**: Containers that enclose food on all sides. Interlocking pieces or overlapping walls hold the container closed for transport.
  
  • Examples:
    • Clamshells
    • Bakery boxes
    • Deli containers
Defining “specific food packaging applications”

- **Flat serviceware**: Shallow, flat-bottomed containers with large surface areas used for serving food. May have one large surface or multiple compartments to separate food items.

- **Examples**:
  - Plates
  - Cafeteria-style trays
Defining “specific food packaging applications”

- **Open-top containers**: Containers that enclose food on all but one side. They are designed to hold solid foods for serving or transportation.
- **Examples:**
  - French fry cartons
  - Food boats
  - Paper cones
- Bowl, bags and sleeves can be used as open-top containers, but not all open-top containers can be used as bowls, bags, or sleeves.
Defining “specific food packaging applications”

- **Bags & Sleeves**: Flat-bottom bags used to transport food or sealed-end bags that can hold food for either service or transport. Made from flexible material.
- **Bowls**: Open-topped containers with wide openings and bottoms that allow spooning of food.
  - Also includes portion cups.
Candidate alternatives to PFAS in food packaging

• For each of the five food packaging applications, we need to identify candidate alternatives to evaluate in the AA.

• Alternatives will be one of three types.

• Principles used to identify candidate alternatives:
  • Food and Drug Administration (FDA) approved.
  • Known/likely safer.
  • Availability in food packaging market.
  • Has publicly available information.
  • Meets environmental performance standards.
Candidate alternatives for second AA

- **Alternative chemical treatments**: applied to paper instead of PFAS
  - Bio-based coatings
    - Bio-based waxes
    - Polylactic acid (PLA)
  - Plastic coatings
    - Acrylics
    - Polyvinyl alcohol (PVOH) and ethylene vinyl alcohol (EVOH) copolymer
    - Polyethylene (PE) and polyethylene terephthalate (PET)
  - Paraffin wax
  - Clay
  - Siloxanes
  - Proprietary treatments
Candidate alternatives to PFAS in food packaging

- **Alternative chemical treatments**: applied to paper instead of PFAS
  - Includes alternatives that are:
    - Applied as coatings to surface of paper or paperboard.
    - Added to plant fiber slurry before paper or paperboard is formed.
  - May need to consider alternative mold release agents (or de-molding agents) for molded fiber products.
    - Potential source of PFAS in molded fiber products.
    - Extent of use not well known.
Candidate alternatives to PFAS in food packaging

• **Alternative base materials**: materials used in place of PFAS-treated paper, either:
  • Plant fiber based (e.g. bamboo, sugarcane, vegetable parchment)
  • Non-fiber based:
    • Biologically derived/compostable plastics (PLA and polyhydroxyalkanoate or PHA)
    • Aluminum

• **System alternatives**: used instead of disposable packaging
  • Reusable food contact products.
Alternatives to PFAS not considered

- **Single-use, petroleum-based plastic** materials used in place of PFAS-treated paper.
  - Includes polypropylene, PET, high density PE
- **Polystyrene** materials used in place of PFAS-treated paper.
- Emerging alternative substances.
Information we are looking for

• Reminder: Our alternatives assessment must use IC2 AA guide modules to evaluate potential alternatives:
  • Chemical hazard
  • Exposure
  • Performance
  • Cost and availability

• We’re interested in information about:
  • An alternative substance (see candidate alternative list).
  • A product that uses a known, specific alternative substance.
Information we are looking for

• Information to help evaluate chemical hazard or exposure potential:
  • Chemical or product identity.
  • Chemical or product hazard assessments (must use relevant hazard assessment).
  • Physiochemical properties or exposure data.

• Information about the performance of a product made using a known alternative:
  • Promotional materials or product performance data sheets.
  • Information from product consumers about performance.
  • Case studies of product use by companies.
Information we are looking for

• Information about the cost and availability of a product made using a known alternative:
  • Product cost information, such as price differences.
  • Availability of reusable food container programs.
  • Availability of specific alternative chemical treatments or base materials.
  • General cost or availability information about food packaging, such as:
    • Market or price information.
    • Lifecycle costs associated with the use of different types of food packaging.
    • Case studies of PFAS-free food packaging use.
We want to hear your feedback!

• We welcome your feedback during our Q&A session coming up
• We also welcome your feedback in the coming weeks
• A draft of this scope document is on our website:
  • Please submit a comment with your feedback.
  • If you have relevant information for the assessment, reach out!
• Reach out if you’d like to set-up a follow-up meeting.
## Expected Timeline

<table>
<thead>
<tr>
<th>Action</th>
<th>Expected timeframe</th>
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<tbody>
<tr>
<td>Input on draft scope</td>
<td>Now – End June 2021</td>
</tr>
<tr>
<td>Revising scope (if needed)</td>
<td>July 2021</td>
</tr>
<tr>
<td>Release draft assessment of PFAS as a class for input</td>
<td>Summer 2021</td>
</tr>
<tr>
<td>Release draft assessment methods</td>
<td>Fall 2021</td>
</tr>
<tr>
<td>Collect new information</td>
<td>Now – End 2021</td>
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Questions?

Contact us


Rae Eaton: rae.eaton@ecy.wa.gov
## Feedback during Q&A

### Definitions
- Applications should be defined more broadly (on level of packaging category)

### Candidate alternatives

### Information asks
- goodstartpackaging.com has a lot of alternatives various types with pricing

### Other feedback
- Many states are moving to ban PFAS in products, speed is essential
- Ecology has identified safer materials, can that be enough to find safer alternatives
- Ecology should work to more quickly incorporate new information about products- market moves quickly
- Other stakeholders interested in a slower timeline- concerned about pressure caused by recent expanded polystyrene ban