



# PROPOSED RULE MAKING

## CR-102 (July 2022) (Implements RCW 34.05.320) Do NOT use for expedited rule making

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FILED

DATE: December 07, 2022

TIME: 8:15 AM

WSR 22-24-107

Agency: Department of Ecology AO #21-01

Original Notice

Supplemental Notice to WSR \_\_\_\_\_

Continuance of WSR \_\_\_\_\_

Preproposal Statement of Inquiry was filed as WSR 21-23-105 ; or

Expedited Rule Making--Proposed notice was filed as WSR \_\_\_\_\_; or

Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or

Proposal is exempt under RCW \_\_\_\_\_.

**Title of rule and other identifying information:** (describe subject) The Washington Department of Ecology (Ecology) proposes a new chapter in the Washington Administrative Code—Chapter 173-337 WAC – Safer Products Restrictions and Reporting. This new chapter aims to reduce toxic chemicals in consumer products and implement Chapter 70A.350 RCW.

For more information on this rulemaking, visit: <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-337>.

### Hearing location(s):

| Date:            | Time:             | Location: (be specific)   | Comment:   |
|------------------|-------------------|---|--|
| January 18, 2023 | 10:00 a.m.<br>PST | Join the online hearing:<br><a href="https://waecy-wa.gov.zoom.us/j/87086239384?pwd=ZjU0Vnk1xWjFnYmp5VDMvZWlHRUMyZz09">https://waecy-wa.gov.zoom.us/j/87086239384?pwd=ZjU0Vnk1xWjFnYmp5VDMvZWlHRUMyZz09</a> | Ecology is hosting this event online and will provide a presentation about the proposed rule, a question-and-answer session, and the formal hearing. You can attend this event from any device with internet access. |
| January 19, 2023 | 5:30 p.m.<br>PST  | Join the online hearing:<br><a href="https://waecy-wa.gov.zoom.us/j/88155960286?pwd=NXISZ3gzOEdoYzNGVIJQZHV0a05mZz09">https://waecy-wa.gov.zoom.us/j/88155960286?pwd=NXISZ3gzOEdoYzNGVIJQZHV0a05mZz09</a>   | Ecology is hosting this event online and will provide a presentation about the proposed rule, a question-and-answer session, and the formal hearing. You can attend this event from any device with internet access. |

Date of intended adoption: May 15, 2023 (Note: This is **NOT** the effective date)

### Submit written comments to:

Name: Stacey Callaway  
Address: Send US mail to:  
Department of Ecology  
Hazardous Waste and Toxics Reduction Program  
PO Box 47600, Olympia, WA 98504-7600 (US mail)  
Email: [saferproductswa@ecy.wa.gov](mailto:saferproductswa@ecy.wa.gov)  
Fax: N/A  
Other: Online: <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-337>  
By (date) February 5, 2023

### Assistance for persons with disabilities:

Contact Ecology ADA Coordinator  
Phone: 360-407-6831  
Fax: N/A  
TTY: For Washington Relay Service or TTY call 711 or 877-833-6341  
Email: [ecyADAcordinator@ecy.wa.gov](mailto:ecyADAcordinator@ecy.wa.gov)  
Other: Visit <https://ecology.wa.gov/accessibility>  
By (date) January 13, 2023

### Purpose of the proposal and its anticipated effects, including any changes in existing rules:

Ecology plans to conduct this rulemaking to:

- Reduce the use of priority chemicals in priority consumer products.
- Develop Chapter 173-337 WAC in accordance with the regulatory actions outlined in the [Final Regulatory Determinations Report](#) to the Legislature—Ecology submitted in June, 2022.

This rulemaking proposes to:

- Create reporting requirements or restrictions that apply to priority consumer products that contain priority chemicals. These include:
  - PFAS in aftermarket stain- and water-resistance treatments, carpets and rugs, and leather and textile furnishings.
  - Phthalates in personal care products (fragrances) and vinyl flooring.
  - Organohalogen flame retardants in electric and electronic products.
  - Flame retardants (as defined in RCW 70A.350.010) in recreational polyurethane foam.
  - Phenolic compounds in laundry detergent, food and drink can linings, and thermal paper.
- Include provisions for repair and replacement parts, refurbished products, and previously owned products.

**Reasons supporting proposal:** Steady releases of chemicals from millions of consumer products make up the largest source of toxics entering Washington’s environment. Toxic chemicals in consumer products can expose people:

- Directly from items such as personal care products, furniture, and household products.
- Indirectly from their environment—air we breathe, water we drink, and food we eat.

In 2019, the Washington State Legislature passed the Pollution Prevention for Healthy People and Puget Sound Act to make consumer products safer for our families and environment. [Chapter 70A.350 RCW](#) directs Ecology to restrict chemicals in products when safer alternatives exist. The proposed rule aims to:

- Reduce the use of toxic chemicals in products by restricting those chemicals when Ecology identifies safer, available, and feasible alternatives.
  - Reduce consumers’ exposure to toxic chemicals.
  - Reduce the amount of toxic chemicals that enter the environment.
- Increase product ingredient transparency.
- Encourage changes in the broader marketplace, both nationally and internationally.

**Statutory authority for adoption:** Chapter 70A.350 RCW – Toxic Pollution

**Statute being implemented:** Chapter 70A.350 RCW – Toxic Pollution

**Is rule necessary because of a:**

- Federal Law?  Yes  No
- Federal Court Decision?  Yes  No
- State Court Decision?  Yes  No

If yes, CITATION:

**Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:** For more information on this rulemaking, visit <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-337>. For more information on the Safer Products for Washington program, visit [https://www.ezview.wa.gov/site/alias\\_1962/37555/safer\\_products\\_for\\_washington.aspx](https://www.ezview.wa.gov/site/alias_1962/37555/safer_products_for_washington.aspx).

**Type of proponent:**  Private  Public  Governmental

**Name of proponent:** (person or organization) Department of Ecology

**Name of agency personnel responsible for:**

|                 | Name            | Office Location | Phone        |
|-----------------|-----------------|-----------------|--------------|
| Drafting:       | Stacey Callaway | Lacey, WA       | 360-584-5661 |
| Implementation: | Camille Bennett | Lacey, WA       | 360-688-4312 |
| Enforcement:    | Camille Bennett | Lacey, WA       | 360-688-4312 |

**Is a school district fiscal impact statement required under [RCW 28A.305.135](#)?**  Yes  No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:

Name: N/A  
Address: N/A  
Phone: N/A  
Fax: N/A  
TTY: N/A  
Email: N/A

Other: N/A

**Is a cost-benefit analysis required under [RCW 34.05.328](#)?**

Yes: A preliminary cost-benefit analysis may be obtained by contacting:

Name: Stacey Callaway

Address: Department of Ecology  
Hazardous Waste and Toxics Reduction Program  
PO Box 47600, Olympia, WA 98504-7600 (US mail)

Phone: 360-584-5661

Fax: N/A

TTY: For Washington Relay Service or TTY call 711 or 877-833-6341

Email: [saferproductswa@ecy.wa.gov](mailto:saferproductswa@ecy.wa.gov)

Other:

No: Please explain:

**Regulatory Fairness Act and Small Business Economic Impact Statement**

Note: The [Governor's Office for Regulatory Innovation and Assistance \(ORIA\)](#) provides support in completing this part.

**(1) Identification of exemptions:**

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see [chapter 19.85 RCW](#)). For additional information on exemptions, consult the [exemption guide published by ORIA](#). Please check the box for any applicable exemption(s):

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.061](#) because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by [RCW 34.05.313](#) before filing the notice of this proposed rule.

This rule proposal, or portions of the proposal, is exempt under the provisions of [RCW 15.65.570](#)(2) because it was adopted by a referendum.

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025](#)(3). Check all that apply:

[RCW 34.05.310](#) (4)(b)  
(Internal government operations)

[RCW 34.05.310](#) (4)(e)  
(Dictated by statute)

[RCW 34.05.310](#) (4)(c)  
(Incorporation by reference)

[RCW 34.05.310](#) (4)(f)  
(Set or adjust fees)

[RCW 34.05.310](#) (4)(d)  
(Correct or clarify language)

[RCW 34.05.310](#) (4)(g)  
(i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025](#)(4) (does not affect small businesses).

This rule proposal, or portions of the proposal, is exempt under RCW \_\_\_\_\_.

Explanation of how the above exemption(s) applies to the proposed rule:

**(2) Scope of exemptions: Check one.**

The rule proposal is fully exempt (*skip section 3*). Exemptions identified above apply to all portions of the rule proposal.

The rule proposal is partially exempt (*complete section 3*). The exemptions identified above apply to portions of the rule proposal, but less than the entire rule proposal. Provide details here (consider using [this template from ORIA](#)): Elements of the rule are specified in the authorizing statute (chapter 70A.350 RCW) such as requirements for the Safer Products Washington process and chemicals to be regulated. The impacts of the proposed rule are also mitigated by baseline requirements (required by law or rule regardless of adoption of the proposed rule), including 15 USC 2601. Finally, we did not identify small businesses in Washington in one of the industries affected by the proposed rule, though we did in other industries. See the Preliminary Regulatory Analyses - Ecology publication number 22-04-042 for this rulemaking for details.

The rule proposal is not exempt (*complete section 3*). No exemptions were identified above.

**(3) Small business economic impact statement: Complete this section if any portion is not exempt.**

If any portion of the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

No Briefly summarize the agency's minor cost analysis and how the agency determined the proposed rule did not impose more-than-minor costs. \_\_\_\_\_

Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses and a small business economic impact statement is required. Insert the required small business economic impact statement here:

This Small Business Economic Impact Statement (SBEIS) presents the:

- Compliance requirements of the proposed rule.
- Results of the analysis of relative compliance cost burden.
- Consideration of lost sales or revenue.
- Cost-mitigating action taken by Ecology, if required.
- Small business and local government consultation.
- Industries likely impacted by the proposed rule.
- Expected net impact on jobs statewide.

A small business is defined by the Regulatory Fairness Act (chapter 19.85 RCW) as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the regulations in the absence of the rule. The SBEIS only considers costs to “businesses in an industry” in Washington State. This means that impacts, for this document, are not evaluated for government agencies.

The existing regulatory environment is called the “baseline” in this document. It includes only existing laws and rules at federal and state levels.

This information is excerpted from Ecology’s complete set of regulatory analyses for this rulemaking. For complete discussion of the likely costs, benefits, minimum compliance burden, and relative burden on small businesses, see the associated Regulatory Analyses document (**Ecology publication no. 22-04-042, December 2022**)

### **COMPLIANCE REQUIREMENTS OF THE PROPOSED RULE, INCLUDING PROFESSIONAL SERVICES**

The baseline for our analyses generally consists of existing rules and laws, and their requirements. This is what allows us to make a consistent comparison between the state of the world with and without the proposed rule.

For this rulemaking, the baseline includes:

- Toxic Pollution (Chapter 70A.350 RCW)
- Toxic Substances Control Act, 15 U.S.C. §§2601, et seq.

The proposed rule would make the following changes:

- Restricting specific priority chemicals in designated priority consumer products.
- Requiring reporting of the use of specific priority chemicals in designated priority consumer products.

#### ***Restricting specific priority chemicals in designated priority consumer products***

##### **Baseline**

Even if there are other regulations on priority chemicals and priority consumer products, we presume there currently are no restrictions on the specific combinations of priority chemicals in priority consumer products in Washington state.

##### **Proposed**

The proposed rule establishes restrictions on five priority chemicals in ten designated priority consumer products manufactured, sold (including but not limited to wholesale, online, or retail), or distributed in Washington state.

In general, the restrictions prohibit the intentional use or addition of priority chemicals in priority consumer products. In some cases, the proposed rule sets concentration limits to align with restrictions from other jurisdictions. In other cases, where there were no existing limits, we either set a limit based on functionality or developed a rebuttable presumption. The rebuttable presumption describes our logic process for identifying products where restricted priority chemicals are likely intentionally added.

When we test regulated priority consumer products to determine compliance with the proposed rule, and we detect the chemicals identified in the rebuttable presumption, we will contact the manufacturer. The manufacturer then can rebut that presumption by certifying that they are not intentionally adding priority chemicals and providing some evidence to support that statement.

We expect the costs associated with rebutting Ecology’s presumptions around intentional use to be minimal. This is for two reasons: Ecology has limited product testing resources and will only be able to test a handful of products for each product category.

We provide manufacturers with significant flexibility on how they rebut our presumptions. In some cases, it could be a certified letter from their suppliers, in other cases, it could be product testing. Product testing is not necessary if manufacturers have sufficient transparency across their supply chains, or if they undertake improving supply chain transparency.

Although we expect some costs associated with the rebuttable presumption, we do not analyze them in the PRA, because we do not require manufacturers to rebut the presumption. We also cannot confidently estimate the frequency of rebuttals but assume that they would only undertake rebuttal if it was a net savings over otherwise needing to comply. So, our estimates of compliance costs and benefits conservatively assume no one rebuts the presumption in the proposed rule.

##### **Expected impact**

We expect the proposed rule to impact costs and the health of humans and the environment.

We expect this requirement to result in costs to manufacturers, sellers (including but not limited to wholesale, online, or retail), and distributors of priority consumer products containing priority chemicals in Washington state. The costs would occur because some of the covered parties would have to reorient their production and investment patterns, and some would have to reconfigure their supply chains.

For some product categories, manufacturers would be required to integrate or develop new chemistries, redesign, or reformulate the product, and recertify new products.

Another main factor is the time needed to redesign products, so they meet safety standards, performance requirements, and aesthetic preferences.

In some instances, we expect decreased costs (benefits) for business, such as when product redesign eliminates the need for added chemicals. This would mean that a manufacturer would skip the step of adding a chemical to the production process.

Many of the chemicals included in the proposed rule are associated with human and environmental hazards:

- Cancer.
- Reproductive harm.
- Developmental harm.
- Endocrine disruption.
- Persistence in the environment.

If we continue to use and release these chemicals, they will continue to accumulate in the environment. People and animals interacting with the environment will experience increased exposures over time.

Contamination from priority chemicals has led to expensive clean-up efforts and widespread drinking water contamination.

By restricting the use of these chemicals in products where safer alternatives are feasible and available, we can reduce future clean-up costs and reduce the burden of diseases caused by the chemicals in the environment. This will benefit human health and the environment.

### ***Requiring reporting use of specific priority chemicals in designated priority consumer products***

#### **Baseline**

Although currently there is no requirement to report specific priority chemicals in designated priority consumer products in Washington state, for many reporting parties a reporting requirement already exists in other jurisdictions. Some chemicals within these classes are also included in our Chemicals of High Concern to Children (CHCC) list and are required to be reported in children's products as part of our Children's Safe Products Act. See WAC 173-334.

#### **Proposed**

The purpose of the proposed rule's reporting requirement is to increase transparency in product ingredients. The proposed rule establishes reporting requirements for five priority chemicals in four designated priority consumer product categories. The proposed rule states reporting party may be the:

- Manufacturer of the priority consumer product, or
- A trade organization representing the manufacturer.

The proposed rule would require the reporting party to submit a notification to Ecology:

- By January 31 of the year after the effective date of the reporting requirement, as listed in the table below.
- Annually thereafter by January 31 each year.

The reporting party may submit a revised notification to Ecology when a priority consumer product no longer contains an intentionally added priority chemical.

The notification must include the following information about a priority consumer product containing an intentionally added priority chemical, that is sold or offered for sale in Washington state during the prior calendar year:

- The name and CAS RN (Chemical Abstracts Service Registry Number) of the priority chemical that is intentionally added. If the priority chemical has a CAS RN.
- The product category that contains the priority chemical. The product category means the "brick" level of the GS1 Global Product Classification (GPC) standard, which identifies products that serve a common purpose, are of a similar form and material, and share the same set of category attributes.
- The product component within the product category that contains the priority chemical. The product component means a uniquely identifiable material or coating (including ink or dye) that is intended to be included as a part of a finished priority consumer product.
- A description of the function of the priority chemical.
- The concentration range of each intentionally added priority chemical in each product component in each product category. The reporting party may report the concentration in ranges rather than the exact concentration. If there are multiple concentrations for a given product component in a particular product category, the reporting party must report the highest concentration.
- The reporting ranges are:
  1. Less than 100 ppm (0.01 percent).
  2. Equal to or more than 100 ppm (0.01 percent), but less than 500 ppm (0.05 percent).
  3. Equal to or more than 500 ppm (0.05 percent), but less than 1,000 ppm (0.1 percent).
  4. Equal to or more than 1,000 ppm (0.1 percent), but less than 5,000 ppm (0.5 percent).
  5. Equal to or more than 5,000 ppm (0.5 percent), but less than 10,000 ppm (1.0 percent).
  6. Equal to or more than 10,000 ppm (1.0 percent).
- Contact information
  1. The name and address of the reporting party.
  2. The name, address, phone number, and electronic mail address of the contact person for the reporting party.
  3. When a trade organization serves as the reporting party, the notification must include a list of the manufacturers they report for and all the required information.

4. Which option in the hierarchy in the proposed rule best represents the reporting party.
5. Any other information the reporting party deems relevant to the appropriate use of the product.

**Expected impact**

Reporting parties must notify Ecology when they use a specific priority chemical in a specific priority consumer product. The reporting parties would need to create an account in the Interstate Chemical Clearinghouse (IC2) High Priority Chemicals Data System (HPCDS), create their inventory, and then create their annual report.

Reporting parties don't always know which chemicals are in their consumer product or the components, so they may need to contact entities in their supply chain to determine what chemicals are present.

This will likely also result in informational benefits, including increasing consumer awareness and informing government decision-making, reducing potential health impacts and litigation, and improving industry understanding of the presence of these chemicals across the supply chain. This knowledge would also serve as a deterrent for future uses where safe alternatives are available

**COSTS OF COMPLIANCE: EQUIPMENT, SUPPLIES, LABOR, PROFESSIONAL SERVICES, ADMINISTRATIVE COSTS**

Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of professional services, based on the necessary estimation methods to deal with data gaps. Costs were estimated in terms of maximum potential lost sales (see next section)

**COSTS OF COMPLIANCE: OTHER**

Average annual costs per business in worst-case scenario for the restriction of specific priority chemicals in designated in designated priority consumer products, 5-year adaptation:

| Chemical                       | Industry   | Assumed share to switch, % | Possible maximum sales loss (millions \$) | Maximum annual costs for market (millions \$) | Number of businesses | Maximum annual cost per business |
|--------------------------------|--|----------------------------|---|---|----------------------|----------------------------------|
| PFAS                           | Aftermarket stain and water resistance treatments          | 15                         | \$2.1                                     | \$0.4   | 208                  | \$2,049                          |
| PFAS                           | Carpet and rugs  | 5                          | \$11.8                                    | \$2.4   | 464                  | \$5,067                          |
| PFAS                           | Leather and textile furnishings                            | 50                         | \$77.4                                    | \$15.5  | 1,139                | \$13,595                         |
| Ortho-Phthalates               | Personal care and beauty products (fragrance)              | 0.7                        | \$62.5                                    | \$12.5  | 4,357                | \$2,869                          |
| Ortho-Phthalates               | Vinyl flooring   | 2.4                        | \$47.4                                    | \$9.5   | 5,036                | \$1,881                          |
| Organohalogen Flame retardants | Electric and electronic equipment (plastic device casings) | 50                         | \$286.3                                   | \$57.3  | 3,388                | \$16,902                         |
| Flame retardants               | Recreational polyurethane foam products                    | 64                         | \$0                                       | \$0   | 0                    | \$0                              |
| APE                            | Laundry detergent  | 95                         | \$1.9                                     | \$0.4   | 519                  | \$732                            |
| Bisphenols                     | Drink can linings  | 5                          | \$25.1                                    | \$5.0   | 352                  | \$14,242                         |
| Bisphenols                     | Thermal paper  | 50                         | \$34.7                                    | \$6.9   | 256                  | \$27,142                         |
| Total                          | n/a  | n/a                        | \$549.2                                   | \$109.9                                       | 15,719               | n/a                              |

**COMPARISON OF COMPLIANCE COST FOR SMALL VERSUS LARGE BUSINESSES**

We calculated the estimated per-business costs to comply with the proposed rule, based on the costs estimated in Chapter 3 of this document. Note that in Chapter 3 we identified losses in sales for businesses in the US with sales in Washington. The losses indicate how much of the revenues a business would lose if not adapted to the new regulations before the effective date. The costs of restrictions are shown for potentially illustrative purposes only.

In this section, we estimate compliance costs per employee for businesses in Washington. The results are shown in the tables below.

**Compliance costs per employee for businesses with sales consumer products with PFAS.**

| Type of cost (or total cost), by industry | Low | High |
|---|-----|------|
| <b>Aftermarket stain treatments</b>       | -   | -    |
| Average small business employment         | 9   | 9    |

|   |                 |           |
|---|-----------------|-----------|
| Average employment at largest ten percent of businesses | NA <sup>1</sup> | NA        |
| Small business cost per employee                        | \$11,198        | \$44,791  |
| Largest business cost per employee                      | NA              | NA        |
| <b>Carpets and rugs</b>                                 | -               | -         |
| Average small business employment                       | 5               | 5         |
| Average employment at largest ten percent of businesses | NA              | NA        |
| Small business cost per employee                        | \$53,707        | \$214,830 |
| Largest business cost per employee                      | NA              | NA        |
| <b>Leather and textile</b>                              | -               | -         |
| Average small business employment                       | 11              | 11        |
| Average employment at largest ten percent of businesses | NA              | NA        |
| Small business cost per employee                        | \$36,107        | \$144,430 |
| Largest business cost per employee                      | NA              | NA        |

As we did not identify large businesses in the above industries that would be impacted by the proposed rule, the RFA requires us to consider all cost-mitigating options listed in the law, as far as is legal and feasible.

**Compliance costs per employee for businesses with sales of consumer products with ortho-phthalates.**

| Type of cost (or total cost)                            | Low      | High      |
|---|----------|-----------|
| <b>Personal care products</b>                           | -        | -         |
| Average small business employment                       | 7        | 7         |
| Average employment at largest ten percent of businesses | 240      | 240       |
| Small business cost per employee                        | \$68,672 | \$274,687 |
| Largest business cost per employee                      | \$732    | \$2,926   |
| <b>Vinyl flooring</b>                                   | -        | -         |
| Average small business employment                       | 4        | 4         |
| Average employment at largest ten percent of businesses | 400      | 400       |
| Small business cost per employee                        | \$12,939 | \$51,757  |
| Largest business cost per employee                      | \$362    | \$1,446   |

We conclude that the proposed rule is likely to have disproportionate impacts on small businesses, and therefore Ecology must include elements in the proposed rule to mitigate this disproportion, as far as is legal and feasible. As we could not identify any large businesses in the leather and textile industry, the RFA requires us to consider all cost-mitigating options listed in the law, as far as is legal and feasible.

**Compliance costs per employee for businesses with sales of consumer products with flame retardants**

| Type of cost (or total cost)                            | Low       | High        |
|---|-----------|-------------|
| <b>Recreational polyurethane foam products</b>          | -         | -           |
| Average small business employment                       | \$705,530 | \$2,822,122 |
| Average employment at largest ten percent of businesses | NA        | NA          |
| Small business cost per employee                        | \$68,832  | \$275,329   |
| Largest business cost per employee                      | NA        | NA          |

We identified only large businesses affected by the proposed rule's restriction on flame retardants in electronic products. As no small businesses are likely impacted, this section of the proposed rule is exempt under the RFA (RCW 19.85.025(4)).

As we did not identify large businesses in the recreational polyurethane foam product industry that would be impacted by the proposed rule, the RFA requires us to consider all cost-mitigating options listed in the law, as far as is legal and feasible.

**Compliance costs per employee for businesses with sales consumer products with APEs**

| Type of cost (or total cost)                            | Low     | High    |
|---|---------|---------|
| Average small business employment                       | 2       | 2       |
| Average employment at largest ten percent of businesses | 65      | 65      |
| Small business cost per employee                        | \$1,071 | \$4,283 |
| Largest business cost per employee                      | \$737   | \$2,947 |

<sup>1</sup> We determined that all of the businesses in these industries working in Washington state are small.

We conclude that the proposed rule is likely to have disproportionate impacts on small businesses, and therefore Ecology must include elements in the proposed rule to mitigate this disproportion, as far as is legal and feasible.

**Compliance costs per employee for businesses with sales of consumer products with bisphenols – thermal paper**

| Type of cost (or total cost)                            | Low      | High     |
|---|----------|----------|
| Average small business employment                       | 9        | 9        |
| Average employment at largest ten percent of businesses | NA       | NA       |
| Small business cost per employee                        | \$17,091 | \$68,366 |
| Largest business cost per employee                      | NA       | NA       |

As we did not identify large businesses in the above industry that would be impacted by the proposed rule, the RFA requires us to consider all cost-mitigating options listed in the law, as far as is legal and feasible.

**Compliance costs per employee for drink can linings**

We did not identify businesses manufacturing drink can linings in Washington state.

**CONSIDERATION OF LOST SALES OR REVENUE**

Businesses that would incur costs could experience reduced sales or revenues if the proposed rule significantly affects the prices of the goods they sell. The degree to which this could happen is strongly related to each business’s production and pricing model (whether additional lump-sum costs would significantly affect marginal costs), as well as the specific attributes of the markets in which they sell goods, including the degree of influence each firm has on market prices, as well as the relative responsiveness of market demand to price changes.

We used the REMI E3+ model for Washington state to estimate the impact of the proposed rule on directly affected markets, accounting for dynamic adjustments throughout the economy. The model accounts for: inter-industry impacts; price, wage, and population changes; and dynamic adjustment of all economic variables over time. As potential maximum costs were modeled as lost sales, we structured REMI inputs as lost sales by specified industries, with consumers reallocating that spending on other goods and services.

Initially, the total value of output (total amount of goods and services produced by Washington businesses) in the state (across all sectors) is modeled to increase by a high of \$644 thousand, with diminishing impacts over time.

**MITIGATION OF DISPROPORTIONATE IMPACT**

The RFA (19.85.030(2) RCW) states that:

“Based upon the extent of disproportionate impact on small business identified in the statement prepared under RCW 19.85.040, the agency shall, where legal and feasible in meeting the stated objectives of the statutes upon which the rule is based, reduce the costs imposed by the rule on small businesses. The agency must consider, without limitation, each of the following methods of reducing the impact of the proposed rule on small businesses:

- a) Reducing, modifying, or eliminating substantive regulatory requirements;
- b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements;
- c) Reducing the frequency of inspections;
- d) Delaying compliance timetables;
- e) Reducing or modifying fine schedules for noncompliance; or
- f) Any other mitigation techniques including those suggested by small businesses or small business advocates.”

We considered all the above options, the goals and objectives of the authorizing statutes (see Chapter 6), and the scope of this rulemaking.

We limited compliance cost-reduction methods to those that:

- Are legal and feasible.
- Meet the goals and objectives of the authorizing statute.
- Are within the scope of this rulemaking.

The scope of this rulemaking was limited to identifying actions – restrictions or reporting – so we could not legally include options a), c), and e).

Ecology was required to start the proposed rulemaking with predetermined requirements, established as actions recommended to the Legislature.

We included the following elements and mitigation techniques in the proposed rule to reduce costs to small businesses.

During the rule development process, Ecology specifically sought input from a variety of industry associations. The intent was to help ensure representation of businesses of all sizes, not just from large manufacturers who have staff dedicated to these types of stakeholder activities. To address potential discrepancies between large and small manufacturers and distributors, we made the following provisions in the rule:

- Incorporated concentration limits and effective dates suggested by manufacturers, distributors, and their representatives as being reasonable.
- Incorporated tiered effective dates for large and small electronics manufacturers. Although “Group 2” businesses may include some that do not qualify as “small” businesses under Washington law, we determined it was preferable to be overinclusive instead of potentially excluding small businesses.
- Left the criteria and process for requesting an exemption open-ended and flexible. This will allow us to respond to small businesses and grant exemptions or compliance extensions on an individualized basis.

- Required the use of the IC2 database when submitting notifications to ECY. Some manufacturers already use this database if they must comply with WA's CSPA (WAC 173-334) and with Oregon regulations. This can reduce costs to small businesses that already use the IC2 database.
- Exempted existing stock and repair and replacement parts manufactured before the effective date. This allows small businesses to continue selling existing stock and to continue repairing products manufactured before the effective date

**SMALL BUSINESS AND LOCAL GOVERNMENT CONSULTATION**

We involved small businesses and local governments in the development of the proposed rule:

- Ecology held 29 stakeholder meetings on the topics of the proposed rule during cycle 1 of the program.
- Ecology organized 19 webinars on the topics of the proposed rule during cycle 1 of the program.
- Ecology published on the Safer Products for Washington web page announcements, reports, and other informational materials.
- Three informal public comment periods on the draft products report, draft regulatory determinations report, and a preliminary draft of the proposed rule.
- Outreach through the WA Department of Health newsletter – shared with local health authorities – encouraging feedback.

**NAICS CODES OF INDUSTRIES IMPACTED BY THE PROPOSED RULE**

The proposed rule likely impacts the following industries, with associated NAICS codes. NAICS definitions and industry hierarchies are discussed at <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2017>

- 443142 Electronics stores
- 334417 Electronic connector manufacturing
- 334111 Electronic computer manufacturing
- 334418 Printed circuit assembly manufacturing
- 334419 Other electronic component manufacturing
- 423620 Household appliances, electric housewares, and consumer electronics wholesalers
- 423690 Other electronic parts and equipment merchant wholesalers
- 326150 Polyurethane foam products manufacturing
- 424610 Plastics foam merchant wholesalers
- 314110 Carpets and rugs made from textile materials
- 423220 Carpet merchant wholesalers
- 442210 Carpet stores
- 442299 Home furnishings stores
- 423220 Home furnishings merchant wholesalers/linens (e.g., bath, bed, table) merchant wholesalers/towels merchant wholesalers
- 314120 Bedspreads and bed sets made from purchased fabrics/towels or washcloths made from purchased fabrics/curtains and draperies, window, made from purchased fabrics
- 337121 Household-type furniture, upholstered, manufacturing
- 337211 Office furniture, padded, upholstered, or plain wood, manufacturing
- 337214 Office furniture (except wood), padded, upholstered, or plain (except wood), manufacturing
- 313310 Chemical finishing (e.g., fire, mildew, water resistance) fabrics
- 332431 Metal cans, light gauge metal, manufacturing
- 322230 Tapes (e.g., adding machine, calculator, cash register) made from purchased paper
- 325992 Heat-sensitized (i.e., thermal) paper made from purchased paper
- 325611 Detergents (e.g., dishwashing, industrial, laundry) manufacturing
- 424690 Detergents merchant wholesalers
- 326199 Vinyl floor coverings manufacturing
- 325199 Perfume materials (i.e., basic synthetic chemicals, such as terpineol) manufacturing
- 325620 Blending and compounding perfume bases / Perfumes manufacturing
- 339999 Atomizers (e.g., perfumes) manufacturing
- 424210 Perfumes merchant wholesalers / Deodorants, personal, merchant wholesalers
- 325611 Hand soaps (e.g., hard, liquid, soft) manufacturing / Bar soaps manufacturing
- 325620 Makeup (i.e., cosmetics) manufacturing / Deodorants, personal, manufacturing / Cosmetic creams, lotions, and oils manufacturing / Hair preparations (e.g., conditioners, dyes, rinses, shampoos) manufacturing

**IMPACT ON JOBS**

We used the REMI E3+ model for Washington state to estimate the impact of the proposed rule on jobs in the state, accounting for dynamic adjustments throughout the economy.

The proposed rule would result in transfers of money within and between industries, as compared to the baseline. The modeled impacts on employment are the result of multiple small increases and decreases in employment, prices, and other economic variables across all industries in the state. As potential maximum costs were modeled as lost sales, we structured REMI inputs as lost sales by specified industries, with consumers reallocating that spending on other goods and services.

| Industry    | Initial Jobs Impact | Jobs Impact in 20 years |
|-------------|---------------------|-------------------------|
| Whole state | 7                   | 0                       |

|                                   |          |          |
|-----------------------------------|----------|----------|
| Household appliance manufacturing | <b>0</b> | <b>0</b> |
| Retail trade                      | <b>7</b> | <b>0</b> |
| Wholesale trade                   | <b>1</b> | <b>0</b> |

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Stacey Callaway

Address: Department of Ecology  
Hazardous Waste and Toxics Reductions Program  
PO Box 47600, Olympia, WA 98504-7600 (US mail)

Phone: 360-584-5661

Fax: N/A

TTY: For Washington Relay Service or TTY call 711 or 877-833-6341

Email: [saferproductswa@ecy.wa.gov](mailto:saferproductswa@ecy.wa.gov)

Other:

|                               |   |
|-------------------------------|---|
| <b>Date:</b> 12/7/22          | <b>Signature:</b><br> |
| <b>Name:</b> Heather Bartlett |   |
| <b>Title:</b> Deputy Director |   |