

## **Environmental Justice Assessment**

# **Chapter 173-339 WAC Cosmetic Products Restrictions**

Hazardous Waste and Toxics Reduction Program

Washington State Department of Ecology Olympia, Washington

August 2025 | Publication 25-04-041

### **Publication Information**

This document is available on the Department of Ecology's website at: https://apps.ecology.wa.gov/publications/SummaryPages/2504041.html

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<sup>&</sup>lt;sup>1</sup> https://ecology.wa.gov/contact

<sup>&</sup>lt;sup>2</sup> https://ecology.wa.gov/ADA

## **Language Services**

Under the state environmental justice law (Chapter 70A.02 RCW), Ecology is required to conduct Environmental Justice Assessments during development of certain significant actions. This assessment provides information about the potential impacts to overburdened communities and vulnerable populations, and strategies to mitigate identified harms and fairly distribute known benefits. For translation, interpretation, or accessibility assistance, please contact Courtney Cecale at courtney.cecale@ecy.wa.gov or (360) 480-6270.

**Spanish**: Bajo la ley estatal de Justicia Medioambiental (Chapter 70A.02 RCW), Ecología está obligada a realizar Evaluaciones de Justicia Medioambiental durante el desarrollo de ciertas medidas importantes. Esta evaluación proporciona información sobre los posibles impactos en las comunidades sobrecargadas y las poblaciones vulnerables, y las estrategias para mitigar los daños identificados y distribuir justamente los beneficios conocidos. Para asistencia de traducción, interpretación o accesibilidad, por favor póngase en contacto con Courtney Cecale escribiendo a courtney.cecale@ecy.wa.gov o llamando al (360) 480-6270.

Chinese: 根据华盛顿州环境正义法(Chapter 70A.02 RCW), 生态管理署在制定某些重大行动时必须进行环境 正义评估。 该评估需提供对负担过重社区和弱势群体潜在影响的信息,以及减轻已明确 的危害和公平分配已知利益的策略。 如需笔译、口译或无障碍协助,请联系 Courtney Cecale, 电子邮件:courtney.cecale@ecy.wa.gov或电话 (360) 480-6270。

Vietnamese: Theo luật Công Bằng Môi Trường của tiểu bang (Chapter 70A.02 RCW), Bộ Môi Sinh được yêu cầu tiến hành Đánh Giá Công Bằng Môi Trường trong quá trình triển khai một số hành động quan trọng. Đánh giá này cung cấp thông tin về các tác động tiềm ẩn đối với các cộng đồng đang chịu tổn hại và các nhóm dân cư dễ bị tổn hại cũng như các chiến lược nhằm giảm thiểu tác hại đã xác định và phân chia công bằng các lợi ích đã biết. Để được hỗ trợ về thông dịch, giải thích hoặc sự giúp đỡ cho người khuyết tật, vui lòng liên hệ với Courtney Cecale theo địa chỉ courtney.cecale@ecy.wa.gov hoặc (360) 480-6270.

Korean: 주 환경부는 중요한 조치를 계획할 때 환경 정의 평가를 수행해야 합니다. 이 평가는 취약계층 지역사회와 취약인구에 대한 잠재적 영향 관련 정보와, 확인된 피해를 완화하고 알려진 혜택을 공정하게 분배하기 위한 전략을 제공합니다. 번역, 통역, 또는 장애인 서비스 지원은 담당자 (Courtney Cecale)에게 이메일 courtney.cecale@ecy.wa.gov 또는 전화 (360) 480-6270으로 문의하십시오.

# **Department of Ecology's Regional Offices**

## Map of Counties Served



Southwest Region 360-407-6300

Northwest Region 206-594-0000

Central Region 509-575-2490

Eastern Region 509-329-3400

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	P.O. Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	P.O. Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 West Alder Street Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 North Monroe Spokane, WA 99205	509-329-3400
Headquarters	Statewide	P.O. Box 47600 Olympia, WA 98504	360-407-6000

## **Environmental Justice Assessment**

# **Chapter 173-339 WAC Cosmetic Products Restrictions**

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## **Executive Summary**

The Washington Department of Ecology (Ecology) conducts Environmental Justice Assessments when planning significant agency actions. The subject of this Environmental Justice Assessment is a rulemaking to develop a new chapter in the Washington Administrative Code (WAC): Chapter 173-339 WAC—Cosmetic Products Restrictions.

The purpose of this rulemaking (or action) is to adopt restrictions in rule to:

- Protect people and the environment in Washington State.
- Lessen the negative impacts on people with disproportionately higher toxic exposure.
- Make cosmetic products safer and reduce consumers' and workers' exposure to formaldehyde.

This action applies to all Washington communities. The intent of this rulemaking is to reduce formaldehyde exposure for people who use cosmetic products and decrease the amount of formaldehyde released into the environment. The adopted rule identifies chemicals used in cosmetic products that release formaldehyde and restricts those chemicals.

Formaldehyde and chemicals that release formaldehyde are found in a wide variety of cosmetic products and used as preservatives and cross-linkers to straighten hair. The use of cosmetic products can cause exposure to toxic chemicals and introduce toxic chemicals into the environment. As stated in our <a href="Chemicals in Cosmetics Used by Washington Residents report">Chemicals in Cosmetics Used by Washington Residents report</a> (January 2023), formaldehyde and chemicals that release formaldehyde:

- Increase risk of developing certain cancers.
- Cause allergic reactions with skin contact.
- Are acutely toxic to humans and other mammals.

The adopted rule doesn't place a ban on specific cosmetic products, retailers, distributors, or manufacturers. Instead, it restricts formaldehyde and certain formaldehyde-releasing chemicals that are intentionally added to cosmetic products. The adopted rule includes a list of restricted formaldehyde-releasing chemicals.

For this rulemaking, we prioritized chemicals most frequently used in cosmetic products in the United States and those used in health equity products of concern. Ninety-nine percent of cosmetic products that use formaldehyde-releasing chemicals contain one of the restricted chemicals listed in the rule. For more information about how we developed the list of formaldehyde-releasing chemicals, see <a href="Formaldehyde-Releasers Technical-Support.4">Formaldehyde-Releasers Technical-Support.4</a>

<sup>&</sup>lt;sup>3</sup> https://apps.ecology.wa.gov/publications/SummaryPages/2304007.html

<sup>&</sup>lt;sup>4</sup> https://apps.ecology.wa.gov/publications/SummaryPages/2504048.html

# Ecology provided opportunities for public comment and Tribal government-to-government consultation. We:

- Conducted community engagement efforts for this action from May to September 2024.
- Provided notices about the rulemaking in Chinese, English, Korean, Russian, Spanish, Ukrainian, and Vietnamese.
- Invited Tribal government-to-government consultation with 29 federally recognized Tribal governments. We didn't receive requests for formal consultation or formal or informal comments from Tribal governments or Tribal organizations.
- Invited public input during two online public workshops in June and August 2024.
- Invited public input on a preliminary draft rule in August 2024 and received input from interested parties.
- Hosted a formal public comment period from February 6 to April 18, 2025, and hosted two online formal hearings on March 31 and April 1, 2025. We received 39 formal comment submissions, including one submission signed by 678 individuals in support of this action.

### Ecology assessed potential environmental benefits and harms from this action.

We identified the following environmental and human health **benefits** from this action. The adopted rule will:

- Reduce formaldehyde exposure for people who use cosmetic products.
- Reduce disproportionate exposure to formaldehyde for members of overburdened communities and vulnerable populations in Washington State.
- Reduce the amount of formaldehyde that enters the environment when cosmetic products are used or disposed of.
- Likely improve indoor and outdoor air quality and reduce environmental pollution from cosmetic products containing toxic chemicals. This helps improve environmental and working conditions for the health of vulnerable populations.

We didn't identify any **environmental harms** from this action.

We identified the following **potential harms** from this action. The adopted rule may:

- Change the availability of certain cosmetic products. Companies that don't reformulate cosmetic products to meet the new restrictions aren't allowed to make, sell, or distribute these products in Washington State. This could reduce the number of cosmetic products available to people in the state.
- Change the performance of cosmetic products. Reformulated cosmetic products may perform differently (better or worse).

 Changes in product availability or performance impact members of overburdened communities and vulnerable populations through product availability and performance. These changes may affect personal, cultural, and other elements of their identity.

The adopted rule protects the people and environment of Washington State. This rule will help reduce exposure to toxic chemicals and may improve health outcomes and safeguard the environment from pathways of pollution. We anticipate the greatest benefit will be for women of color who use cosmetic products and people who work in the cosmetics or cosmetology industry.

Individuals who own or are employed by a cosmetics business, or work in or live near a cosmetic manufacturer, may see reduced occurrences of cancer, asthma, or skin reactions. The restriction on formaldehyde and formaldehyde-releasing chemicals will encourage innovation and development of safer alternatives for use in cosmetic products. Environmental and human health benefits could be compounded for areas with a density of salons, cosmetic businesses, and facilities that manufacture cosmetic products or ingredients used in cosmetic products.

### Introduction

## **Purpose of the Environmental Justice Assessment**

The environmental justice assessment process helps assess the environmental justice impacts of significant agency actions. The assessment informs and supports consideration of overburdened communities and vulnerable populations when making decisions. This information assists with the equitable distribution of environmental benefits, the reduction of environmental harms, and the identification and reduction of health disparities.

The environmental justice assessment process aligns with Washington's environmental justice law, called the Healthy Environment for All (HEAL) Act (<u>Chapter 70A.02 RCW</u>).<sup>5</sup> The assessment process draws on best practices established in <u>Promising Practices for EJ Methodologies in NEPA Reviews</u>.<sup>6</sup>

Environmental justice assessments are to be completed for the following actions:

- The development and adoption of significant legislative rules as defined in <u>RCW</u> 34.05.328.<sup>7</sup>
- The development and adoption of any new grant or loan program that a covered agency is explicitly authorized or required by statute to carry out.
- A capital project, grant, or loan award of at least \$12,000,000 or a transportation project, grant, or loan of at least \$15,000,000.
- The submission of agency request legislation to the office of the governor or the office of financial management for approval.

This assessment is not required to be a comprehensive or an exhaustive examination of all potential impacts of a significant agency action and doesn't require novel quantitative or economic analysis of the proposed significant agency action.

The time and resource investment and depth of assessment will be influenced by the reasonable applicability of the questions to the agency action.

Ecology plans to update this document and incorporate what we learn through practice, community engagement, Tribal consultation, and any guidance we may receive from the Environmental Justice Council.

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<sup>&</sup>lt;sup>5</sup> https://app.leg.wa.gov/RCW/default.aspx?cite=70A.02&full=true

<sup>&</sup>lt;sup>6</sup> https://www.epa.gov/sites/default/files/2016-08/documents/nepa\_promising\_practices\_document 2016.pdf

<sup>&</sup>lt;sup>7</sup> https://app.leg.wa.gov/RCW/default.aspx?cite=34.05.328

## **Section 1: Background**

Ecology included the following information in the notification submitted to the Office of Financial Management Dashboard.<sup>8</sup>

### 1. Descriptive title of project or action

Cosmetic Products Rulemaking

#### 2. Date Environmental Justice Assessment initiated

May 22, 2024

### 3. Ecology Program or Office

Hazardous Waste and Toxics Reduction

#### 4. Point of Contact for Environmental Justice Assessment

Stacey Callaway

### 5. Significant Agency Action type, select one or more

⊠ Rulemaking
□ New grant or loan program
□ New capital project, grant, or loan of \$12 million or more
□ Request legislation
□ Other, explain:

### 6. Write a short summary of the action.

The Washington Department of Ecology (Ecology) started a rulemaking to develop a new chapter in the Washington Administrative Code (WAC): Chapter 173-339 WAC—Cosmetic Products Restrictions. Ecology is conducting this rulemaking to:

- Make cosmetic products safer for consumers and the environment.
- Reduce consumers' and workers' exposure to formaldehyde.
- Address the disproportionate harms caused by cosmetic products in overburdened communities and vulnerable populations.
- Reduce the amount of formaldehyde entering the environment.

<sup>8</sup> https://ofm.wa.gov/budget/budget-related-information/environmental-justice-and-heal-act/environmental-justice-assessment-notices

Under the authority of <u>Chapter 70A.560 RCW</u><sup>9</sup> (Toxic-Free Cosmetics Act), Ecology may adopt a rule that identifies chemicals used in cosmetic products that release formaldehyde and adopt restrictions for the identified formaldehyde-releasing chemicals. This rule may include:

- Restrictions that apply to the use of specified formaldehyde-releasing chemicals used in cosmetic products.
- Allowances for products currently in the chain of commerce—stockpiled or available for purchase.
- Compliance schedules.
- Definitions of key terms such as "intentionally added."
- Other requirements or restrictions allowed by law.

### **Background**

People use cosmetic products every day to clean their bodies or alter their appearance. Cosmetic products include items such as makeup, perfume, shampoo, hair gels, body wash, deodorant, hand lotion, and shaving cream. These products can contain chemicals that are toxic to people and the environment.

In the <u>Chemicals in Cosmetics Used by Washington Residents report</u> (January, 2023), Ecology and the Department of Health found that many cosmetic products contain toxic chemicals. Some products disproportionately marketed to women of color, such as hair relaxers and skin lightening creams, often contain toxic chemicals.

Some chemicals used in cosmetic products release formaldehyde, which exposes people to the chemical when they use the product. Formaldehyde can cause cancer, harm brain function, increase the risk of asthma, and irritate eyes and skin. Exposure can also lead to allergic reactions. Cosmetic products also can release formaldehyde into indoor and outdoor air. Formaldehyde can also enter wastewater streams as products are washed down the drain.

In 2023, Washington State codified Chapter 70A.560 RCW to ensure the safety of cosmetic products and protect Washington residents from toxic exposure. The law:

- Restricts the manufacture, sale, and distribution of cosmetic products containing nine chemicals or chemical classes.
- Directs Ecology to assess the hazards of chemicals or chemical classes that can provide the same or similar function as the restricted chemicals or chemical classes and make that information available to the public.
- Directs Ecology to implement initiatives to support small businesses that manufacture cosmetic products, and to support independent cosmetologists and

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<sup>&</sup>lt;sup>9</sup> https://app.leg.wa.gov/RCW/default.aspx?cite=70A.560

small businesses that provide cosmetology services in efforts to transition to safer cosmetic products.

 Authorizes Ecology to adopt a rule that restricts the use of specified formaldehyde-releasing chemicals used in cosmetic products.

## 7. Identify the method(s) for the public to comment on this proposed action for this assessment.

We plan to conduct engagement for this rulemaking starting this summer and into the winter of 2024. Engagement efforts may include public meetings, a focus group, outreach with community-based organizations, opportunities to review and comment on draft rule requirements, public comment periods, and formal public hearings. We will focus on engaging with overburdened communities and vulnerable populations most impacted by formaldehyde-releasing chemicals in cosmetic products. We will also invite consultation from Tribes who may additionally be interested in informing the development of this work.

As this work continues to develop, we will share details about engagement opportunities and resources on our website and through our email distribution list. For more information, sign up for <a href="mailto:email:announcements">email:announcements</a>, visit our <a href="mailto:rulemaking">rulemaking</a> <a href="mailto:webpage">webpage</a>, or contact Stacey Callaway, rulemaking lead, at <a href="mailto:stacey.callaway@ecy.wa.gov">stacey.callaway@ecy.wa.gov</a> or 360-584-5661.

As we schedule additional opportunities to provide feedback and participate in workshops, we will share details on our webpages and via our email list. We anticipate:

- Developing draft rule requirements in the summer of 2024.
- Sharing a preliminary draft rule, providing a public comment period, and hosting webinars in the summer of 2024.
- Proposing a formal draft rule, providing a public comment period, and hosting hearings, in the fall and winter of 2024.
- Adopting the revised rule in the spring or summer of 2025.

# 8. Create or provide an Ecology webpage with information about this proposed action.

Visit our rulemaking webpage = <a href="https://ecology.wa.gov/regulations-permits/laws-rules-rulemaking/rulemaking/wac-173-339">https://ecology.wa.gov/regulations-permits/laws-rules-rulemaking/rulemaking/wac-173-339</a>

# Section 2: Notification that an Environmental Justice Assessment Has Been Initiated

This section instructs Ecology staff to notify the Office of Financial Management about the initiation of the action.

## **Section 3: Identify Affected Tribes**

This section summarizes preliminary planning for Tribal Consultation. Ecology must offer consultation with Tribes on significant agency actions that affect federally recognized Tribes' rights and interest in their tribal lands.

## Proparing for Tribal consultation

П	repairing for Tribal Consultation				
1.	Is the proposed action likely to have any local or regional impacts to federally reserved Tribal rights and resources, including but not limited to those protected by treaty, executive order, or federal law? Choose one of the following:				
	⊠ Yes				
	□ No				
	☐ Unsure				
2.	List any federally recognized Tribes that are expected to be affected by the proposed action. If it is determined during consultation that Tribes do not wish to be included, then do not include them.				
	This action (rulemaking) is statewide and may indirectly impact federally recognized Tribes in Washington State because it impacts cosmetic products sold online that are distributed to, or used on, Tribal lands. This rulemaking may also impact the availability of cosmetic products that Tribes and Tribal members can purchase outside of Tribal lands.				
	For these reasons, we determined that the following 29 federally recognized Tribes may be impacted by this action.				
	Confederated Tribes and Bands	Makah Tribe			
	of the Yakama Nation	<ul> <li>Muckleshoot Indian Tribe</li> </ul>			
	<ul> <li>Confederated Tribes of the Chehalis Reservation</li> </ul>	<ul> <li>Nisqually Indian Tribe</li> </ul>			
	Confederated Tribes of the	<ul> <li>Nooksack Indian Tribe</li> </ul>			
	Colville Reservation	<ul> <li>Port Gamble S'Klallam Tribe</li> </ul>			
	Cowlitz Indian Tribe	<ul> <li>Puyallup Tribe</li> </ul>			
	Hoh Indian Tribe	<ul> <li>Quileute Tribe</li> </ul>			
	<ul> <li>Jamestown S'Kallam Tribe</li> </ul>	<ul> <li>Quinault Indian Nation</li> </ul>			
	Kalispel Tribe of Indians	<ul> <li>Samish Indian Nation</li> </ul>			
	Lower Elwha Klallam Tribe	<ul> <li>Sauk-Suiattle Indian Tribe</li> </ul>			
	Lummi Nation	<ul> <li>Shoalwater Bay Indian Tribe</li> </ul>			

- Skokomish Indian Tribe
- Snoqualmie Indian Tribe
- Spokane Tribe of Indians
- Squaxin Island Tribe
- Stillaguamish Tribe of Indians

- Suguamish Tribe
- Swinomish Indian Tribal Community
- Tulalip Tribes
- Upper Skagit Indian Tribe
- 3. If it is determined at any other point in the process of the assessment that Tribes have self-identified as being potentially impacted by the action, then include them in the assessment and offer consultation.
- 4. Describe plans to offer consultation to identified Tribes.

Ecology intends to offer government-to-government consultation to 29 Tribal governments at three stages during this rulemaking. We intend to send notifications to Tribal Chairs and Natural Resource Directors when we:

- Announce the start of rulemaking.
- Propose the formal draft rule and announce the formal comment period and formal hearings.
- Adopt the rule.

We also intend to offer Tribal engagement opportunities at Tribal conventions, through relationships with Tribal organizations, and through updates to email distribution lists and Ecology webpages.

### **Section 4: Offer Consultation**

This section directs Ecology staff to offer consultation with Tribes on significant agency actions that affect federally recognized Tribes' rights and interest in their tribal lands.

# Section 5: Summary of Tribal Consultation and Engagement

Tribal consultation is intended to inform the answers to all questions in this section.

### Summary of Tribal consultation

1. Describe potential impacts (including harms and benefits) to federally recognized Tribal rights and interests in their Tribal lands. Do not share sensitive data or location information attributable to individual sites. Do not share any information that Tribes have requested that you not share.

This rulemaking is statewide. It may indirectly impact federally recognized Tribes in Washington State because it impacts cosmetic products sold online that are then distributed to, or used on, Tribal lands and lands with federally protected Tribal rights.

Ecology doesn't have the authority to regulate cosmetic products manufactured, sold, or used on Tribal lands. Tribes are sovereign nations and therefore make their own decisions about regulating cosmetic products on Tribal lands.

However, this action may impact cosmetic products made, distributed, and sold on non-Tribal land in Washington State. Cosmetic products made outside of Tribal lands and cosmetic products brought into Washington State must meet the new restrictions in the law and adopted rule. Therefore, Tribally owned businesses and businesses operating within Tribal lands may see a change in the availability of some cosmetic products offered for sale or distribution in Washington State.

The adopted rule might:

- Reduce formaldehyde exposure for people who use cosmetic products made, sold, or distributed on non-Tribal lands.
- Reduce environmental pollution introduced from cosmetic products containing formaldehyde and chemicals that release formaldehyde entering Tribal and non-Tribal lands and waterways.
- Increase cosmetic products with formaldehyde or formaldehyde-releasing chemicals sold or distributed on Tribal lands because these products are restricted on non-Tribal lands in Washington State. An increase of these products on Tribal lands could lead to an increase in health disparities among those living on or near Tribal lands and introduce pollution into both Tribal and non-Tribal lands and waterways.
- 2. Describe potential impacts related to Tribal rights and interests that are not in Tribal lands.

This rulemaking may indirectly impact federally recognized Tribes in Washington State because it impacts cosmetic products sold online or in physical stores that are then distributed to lands with federally protected Tribal rights.

# 3. Summarize recommendations from Tribes to mitigate or eliminate potential harms from the action.

Ecology didn't receive formal recommendations from Tribal governments. We presented information about the rulemaking at the Affiliated Tribes of Northwest Indians 2024 Winter Convention. During this event, attendees recommended we continue attending Tribal events to build awareness about the rulemaking and our implementation of the adopted rule.

# 4. Summarize recommendations from Tribes to equitably distribute benefits from the action.

We didn't receive requests for government-to-government consultation from any affected Tribes or feedback during Tribal engagement opportunities. Therefore, we didn't discuss or receive recommendations to equitably distribute benefits from the action.

# 5. Describe how consultation, engagement, and analyses of impacts to Tribes has informed the development of the action. If it has not, explain why.

Ecology offered government-to-government consultation to 29 Tribal governments at three stages during this rulemaking. We sent notifications to Tribal Chairs and Natural Resource Directors on:

- May 22, 2024, when we announced the start of rulemaking.
- February 6, 2025, when we proposed the formal draft rule and announced the formal comment period and formal hearings.

No Tribes requested government-to-government consultation in response to our notifications. We also sent notifications about the adopted rule to Tribal Chairs and Natural Resource Directors on August 28, 2025, and invited government-to-government consultation.

We offered engagement opportunities through outreach to Tribal health and youth community groups and organizations, and through presentations and discussions at Tribal events.

Based on feedback from Tribal community organizations and conversations with attendees at the Affiliated Tribes of Northwest Indians 2024 Winter Convention, Ecology staff prioritized education on the Toxic-Free Cosmetics Act awareness campaigns and outreach with Tribal community organizations with interests in holistic human wellness. During the Affiliated Tribes of Northwest Indians summit, we heard from some individuals that the rulemaking isn't a priority for Tribal governments.

However, some Tribal communities, especially those focused on health and wellness, expressed interest in the Toxic-Free Cosmetics Act that authorized Ecology to conduct this rulemaking.

# 6. Describe any plans to continue consultation or engagement with Tribes related to this action.

Ecology will continue to conduct outreach to Tribal governments, members, and community groups in Washington State. Our outreach efforts will focus on the holistic health impacts (effects on a person's or community's well-being, including but not limited to physical, emotional, social, environmental, and economic health) of toxic chemicals in cosmetic products and how the restrictions in rules and laws may impact them as individual consumers, manufacturers, and business owners.

We will continue to identify and support engagement opportunities related to this action, plan for resource needs and funding related to these opportunities, and act on opportunities that interest Tribes. Opportunities include but are not limited to:

- Developing educational materials and guidance and sharing them with Tribal members and community groups.
- Designing culturally relevant materials about natural personal care products by working with groups like <u>yəhaw</u>, <sup>10</sup> a nonprofit South Seattle collective of Indigenous artists.
- Attending and presenting at Tribal events, such as the Affiliated Tribes of Northwest Indians conventions and Tribal community events focused on health and wellness.
- Designing collaborative workshops with Tribal health and community groups focused on reducing toxic chemicals in cosmetic products.
- Promoting two voluntary financial assistance initiatives that support the switch to safer cosmetic products for qualifying businesses in Washington State:
  - The <u>Safer Salons Partnership initiative</u><sup>11</sup> helps independent cosmetologists and small cosmetology businesses with the costs of switching to safer cosmetic products.
  - The <u>Safer Cosmetics Certification Subsidy initiative</u><sup>12</sup> helps small cosmetics manufacturers with the cost of obtaining voluntary environmental health certifications (such as Cradle-to-Cradle) for their cosmetic products.

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<sup>10</sup> https://yehawshow.com/

<sup>&</sup>lt;sup>11</sup> https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/product-replacement-program/cosmetics

https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/safer-alternatives/safer-chemicals-for-manufacturers/cosmetics-certification-subsidy-program

# Section 6: Identification of Overburdened Communities and Vulnerable Populations

This section identifies overburdened communities and vulnerable populations, as identified in the definitions of Chapter 70A.02 RCW, <sup>13</sup> who will be affected by the action.

### Identify overburdened communities and vulnerable populations

1. Identify the geographic area(s) anticipated to be affected by the action.

The adopted rule is statewide and will impact cosmetic products made, sold, or distributed throughout Washington State.

2. When applicable, using the <u>Washington State Department of Health's</u> <u>Environmental Health Disparities Map (EHD Map)</u>, <sup>14</sup> identify the EHD Map rankings for all census tracts likely to be impacted by the action.

All census tracts will be impacted by the adopted rule.

3.	From the rankings identified in question 2, are there any census tracts ranked 9 and 10?
	⊠ Yes

If yes, describe.

 $\sqcap$  No

The adopted rule impacts all census tracts in Washington State and therefore impacts all census tracts ranked 9 and 10.

4. Please describe additional cumulative health considerations relevant to this action.

Cosmetic products can contain multiple types of toxic chemicals. Exposure to toxic chemicals in cosmetic products may add to exposure from other sources of toxic chemicals and worsen health outcomes for communities exposed to higher levels of toxic chemicals or people who are more vulnerable to health impacts.

Formaldehyde is associated with:

- Cancer, including breast and uterine cancer.
- Respiratory problems, including asthma.
- Allergic skin responses that may worsen over time.

<sup>&</sup>lt;sup>13</sup> https://app.leg.wa.gov/RCW/default.aspx?cite=70A.02.010

<sup>14</sup> https://fortress.wa.gov/doh/wtnibl/WTNIBL/

Irritation of and damage to eyes and skin.

Formaldehyde and formaldehyde-releasing chemicals are typically used in cosmetic products as preservatives. They can also provide hair straightening or smoothing functions or be found in nail polish or cosmetic glues. People can be exposed to formaldehyde in cosmetic products by inhalation or absorption through the skin.

The adopted rule restricts the manufacturing, sale, and distribution of cosmetic products that contain intentionally added formaldehyde and chemicals that release formaldehyde. Restricting formaldehyde and formaldehyde-releasing chemicals will lead to a reduction in cumulative health impacts resulting from formaldehyde exposure.

People of color and immigrants are often disproportionately impacted by cumulative health impacts (Ecology, 2023). Individuals who are low-income, people of color, or immigrants to the United States are exposed more frequently to multiple environmental and social risk factors (Morello-Frosch et al., 2011).

Environmental policy and regulatory actions that have a narrow focus on a specific chemical or product often underestimate cumulative health impacts from exposure to multiple chemicals from multiple sources (Morello-Frosch et al., 2011). Reducing toxic chemicals in multiple products can reduce those impacts. However, although the impact of each individual formaldehyde and formaldehyde-releasing chemicals is uncertain, reducing exposure to any toxic chemical can result in cumulative health benefits.

Women of color are most impacted, because of their disproportionate exposure to formaldehyde and formaldehyde-releasing chemicals in cosmetic products. Immigrant women of color are more likely to work in nail salons, where formaldehyde-releasing chemicals are present in many types of nail polish. Additionally, Black women are at higher risk of breast and uterine cancer due to use of hair straightening products marketed to them (Eberle et al., 2019; Chang et al., 2022).

5. When applicable, using the EPA's Environmental Justice Screening and Mapping Tool (EJScreen), 15 identify areas likely to be impacted by the action that are at or above the 80th percentile (in state) for the "people of color" and "low income" socioeconomic indicators.

Information provided is based on census data collected by the United States Census Bureau. Census data is collected for distinct geographic regions, or tracts. Tracts are defined by grouping block groups. A block group is an area the Census Bureau defines as usually having 600-3,000 people living in it. Block groups are made up of smaller geographic units called Census blocks.

Percentiles are a way to see how people in a specific area compare to everyone else in the United States. EJScreen compared a census tract or block group in a state to the entire state, EPA region, and nation, by using percentiles. For example,

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<sup>&</sup>lt;sup>15</sup> https://ejscreen.epa.gov/mapper/ (as of February 2025, EPA's EJScreen mapping tool is offline).

the national percentile shows the percentage of the United States population that has less potential for exposure, risk, or proximity to certain facilities. The United States percentile uses all census tracts or block groups in the United States as the basis of comparison. The state percentile is calculated in reference to other census areas within the state.

The EPA has identified the 80th percentile as an initial starting point and potential indicator of environmental justice considerations. We evaluated the following socioeconomic and health disparity indicators and included the EPA description of each indicator.

### People of color

The percent of individuals in a block group who list their racial status as a race other than White alone or list their ethnicity as Hispanic or Latino. That is, all people other than non-Hispanic White-alone individuals. The word "alone" in this case indicates that the person is of a single race, not multiracial.

#### Low income

The percent of a block groups' population in households where the household income is less than or equal to twice the federal "poverty level." The federal poverty level (FPL) is the annualized income earned by a household below which they would be eligible to receive certain welfare benefits. For example, in 2024 the FPL for a three-person household was \$25,820.00.

#### Asthma

Asthma prevalence among adults aged 18 or older. This data is available at the tract level; the same value is then assigned to all block groups within that tract.

#### Cancer

Cancer (excluding skin cancer) prevalence among adults aged 18 or older. This data is available at the tract level; the same tract value is then assigned to all sub block groups within that tract.

This action is statewide, so all areas at or above the 80<sup>th</sup> state percentile for "people of color" and "low income" will be impacted. This includes Tribal lands, even though Ecology doesn't have authority to regulate cosmetic products manufactured, sold, or used on Tribal lands (see Summary of Tribal Consultation).

We conducted this analysis and captured the maps before the removal of EJScreen in February 2025.

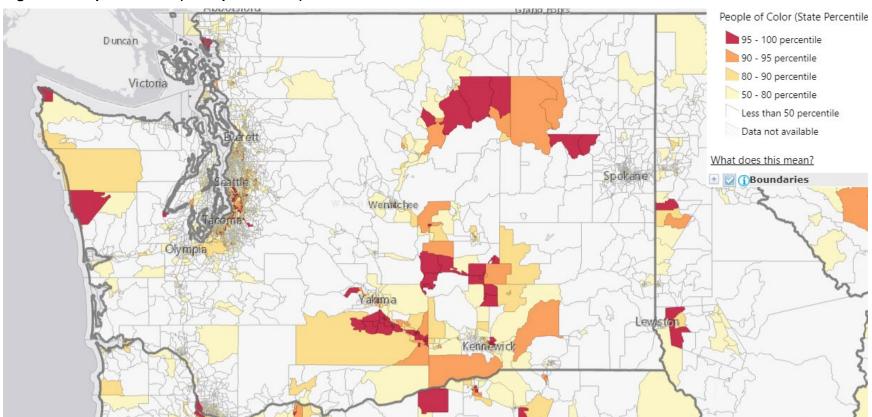


Figure 1. People of color (state percentiles)

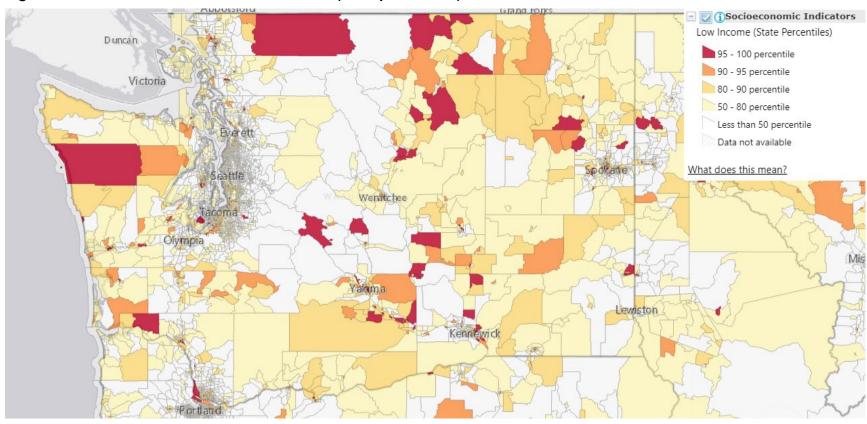


Figure 2. Low income socioeconomic indicator (state percentiles)

6. Identify other EJScreen "Socioeconomic" and "Health Disparities" indicators at or above 80th percentile (in state) that are most relevant to this action.

Nanaimo Kicimono Surrey Abbotsford □ □ (i)Cancer Trail Grand Forks 95 - 100 percentile 90 - 95 percentile Duncan 80 - 90 percentile 50 - 80 percentile Less than 50 percentile No Data Spokane Seattle. Weinstchee Tacoma

Yakima

Kennewick

Figure 3. Cancer health disparity (state percentiles)

Olympia

Lewiston

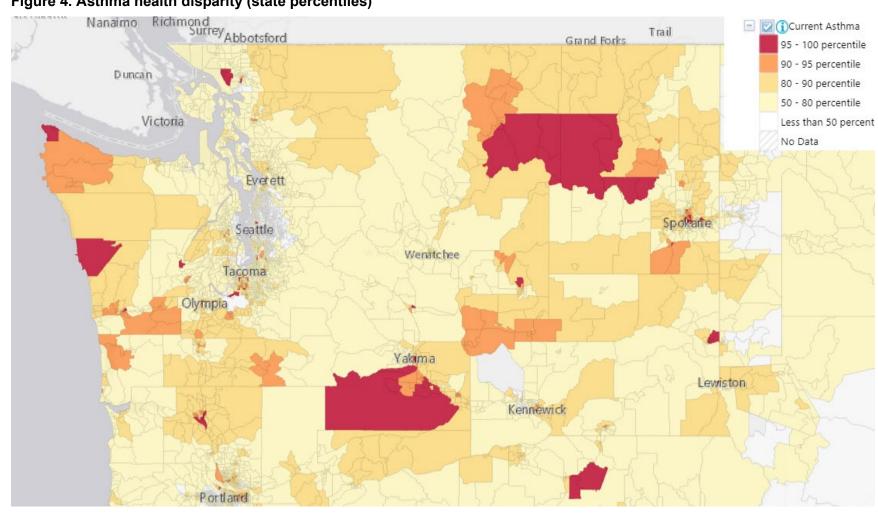


Figure 4. Asthma health disparity (state percentiles)

7. Using EJScreen, identify additional anticipated impacts from climate change in the impacted area, if relevant.

Not relevant to this action.

8. Using the federal Climate and Economic Justice Screening Tool (CEJST), 16 identify if the potentially affected area is considered disadvantaged for climate risks for additional indicators (as relevant).

Not relevant to this action.

9. Identify additional overburdened communities and vulnerable populations that are likely to be affected by the action.

This adopted rule applies statewide. It will likely impact people who use cosmetic products; people who make, sell, or distribute cosmetic products; and people who use cosmetic products in services throughout Washington State.

Additionally, Ecology identified the following vulnerable populations that are likely affected by this action.

- Workers who experience environmental harms, including:
  - Workers in salons who apply treatments containing formaldehyde and formaldehyde-releasing chemicals (for example, certain hair smoothing and hair straightening treatments, nail polish, eyelash glue).
  - Small business owners and workers who rely financially on hair straightening, hair smoothing, nails, and other products and treatments that use formaldehyde and formaldehyde-releasing chemicals.
  - Other workers who may be exposed to harms from the use of cosmetic products that release formaldehyde and who are underrepresented or missing from typical cosmetic research and data collection, including:
    - Artists who use cosmetic products as medium.
    - Performers.
    - Makeup and tattoo artists.
- Communities that have a higher percentage of people working in the salon industry.
- Other population groups that may be disproportionately impacted by environmental harms from the use of cosmetic products that release formaldehyde and are underrepresented or missing from typical cosmetic

<sup>&</sup>lt;sup>16</sup> https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5 (as of February 2025, this tool is offline). This is a national tool and may provide relevant information and understanding of the climate related context of the action. Learn more about the methodology for identifying if a community is disadvantaged for climate risks here: Methodology & data - Climate & Economic Justice Screening Tool (https://screeningtool.geoplatform.gov/en/methodology).

- research and data collection, including men of color, transgender, non-binary, and other gender-diverse people.
- People who live on Tribal lands where formaldehyde-releasing chemicals aren't regulated by Ecology.
- People who experience disproportionately higher toxic exposure or who experience other environmental or health disparities, such as Indigenous populations and communities.
- People of color with textured hair who rely on hair smoothing and hair straightening processes to avoid racism or pressure in the workplace or in social settings to comply with white beauty standards.
- 10. Through community engagement, were additional overburdened communities and vulnerable populations identified who are likely to be affected by the action? Describe additional communities or populations identified, and the reasons they would be considered overburdened and vulnerable.

Through community interactions at a tabling event at Yakima Pride on June 8, 2024, Ecology identified people in LGBTQ+ and drag communities as possible vulnerable populations. These individuals may use cosmetic products such as hair dyes, facial makeups, cosmetic glues, or fixatives that contain formaldehyde-releasing chemicals. Use of these products may disproportionately increase their exposure to toxic chemicals.

11. Through Tribal consultation, were additional overburdened communities and vulnerable populations identified who are likely to be affected by the action? Describe additional communities or populations identified, and the reasons they would be considered overburdened and vulnerable.

No additional overburdened communities or vulnerable populations were identified through Tribal consultation.

Through Tribal engagement at the Affiliated Tribes of Northwest Indians 2024 Winter Convention, youth and educators in Tribal communities were identified as populations likely to be affected by the rulemaking. Children may be a vulnerable population to consider because they are more sensitive than adults to the effects of formaldehyde-releasing chemicals and other toxic chemicals restricted by the Toxic-Free Cosmetics Act.

## **Section 7: Summary of Community Engagement**

This section summarizes community engagement activities. Community engagement should be tailored to specifically reach overburdened communities and vulnerable populations. Community engagement is required for all significant agency actions, but the engagement methods will vary depending on the size, scope, and topic of the project. The level, type, and form of engagement is based on the likelihood that the actions may cause environmental harm or may affect the equitable distribution of environmental benefits to an overburdened community or a vulnerable population.

### Summarizing community engagement

1. Describe the engagement activities with identified overburdened communities and vulnerable populations.

During this rulemaking, Ecology conducted outreach and provided opportunities for engagement to the public and interested parties. We:

- Conducted community engagement efforts for this action from May to September 2024.
- Provided notices about the rulemaking in Chinese, English, Korean, Russian, Spanish, Ukrainian, and Vietnamese.
- Invited government-to-government consultation with 29 federally recognized Tribal governments. We didn't receive requests for formal consultation or formal or informal comments from Tribal governments or Tribal organizations.
- Invited public input during two online public workshops in June and August 2024.
- Invited public input on a preliminary draft rule in August 2024 and received input from interested parties.
- Hosted a formal public comment period from February 6 to April 18, 2025, and hosted two online formal hearings on March 31 and April 1, 2025. We received 39 formal comment submissions, including one submission signed by 678 individuals in support of this action.

In addition to the opportunities listed above, we also:

- Surveyed a focus group of 15 cosmetologists about their use of cosmetic
  products in their businesses, health concerns, and recommendations related to
  cosmetic products and toxic chemicals in them. We conducted multiple
  engagements with members of this group that focused on their community within
  South Seattle. During these engagements, we:
  - Provided Information about Safer Products for Washington, the Toxic-Free Cosmetics Act, and this rulemaking.
  - Provided health education.
  - Answered questions.

- Engaged cosmetologists in two facilitated meetings and two email updates.
   Engagement focused on how this action may impact cosmetologists who work in vulnerable communities most impacted by this action.
- Presented and shared resources at events across Washington State, including Yakima Pride, Mosaic Festival, The Duwamish River Festival, and Korea Expo.
- Presented and shared resources at the Affiliated Tribes of Northwest Indians 2024 Winter Convention and spoke with Tribal health and education leaders.
- Produced and shared blog posts, webinars, email list bulletins, and personal emails to the public and specifically to Tribal health and education leaders, community-based organization directors representing overburdened communities, environmental justice organizations, and local health clinics.
- Met semi-regularly with nonprofit organizations that advocate for beauty justice, like Breast Cancer Prevention Partners and their Black Beauty Project.
- Presented at the nonprofit Serve Ethiopians Washington on June 21, 2024, and December 2, 2024.
- Presented at the nonprofit Cambodian American Community Council of Washington (CACCWA) on February 27, 2025.
- Sponsored, shared resources, and held a live question and answer session at a beauty industry event, "Reign of Style," in Seattle on March 2, 2025. This included:
  - Engaging beauty industry professionals in learning about new restrictions regarding toxic chemicals in cosmetic products.
  - Sharing practical guidance on reducing exposure to harmful substances in consumer products.
- Presented at multiple online webinars for cosmetic industry, retail, and business organizations.
- Presented to the Washington Department of Licensing Cosmetology Board.

### 2. What actions were taken to help address barriers to meaningful engagement?

Ecology used the Community Compensation Act to compensate a community member who helped create and facilitate a focus group for Black hair specialists. Compensation ensured the community member could take the time to work with Ecology staff, recruit cosmetologists who specialized in Black hair, and travel to inperson meetings with the focus group and with Ecology staff.

Ecology staff also attended multiple in-person events to provide information and increase awareness of the action. Examples of some of the specific steps we took include:

 Presenting at, providing in-person interpretation for, and providing translated materials at the nonprofit Cambodian American Community Council of Washington (CACCWA) on February 27, 2025. This workshop was tailored for the Southeast Asian small business community.

- Hosting a live question-and-answer session at the Reign of Style event.
- Presenting for industry representatives during a webinar with the Good Face Project.
- 3. Identify overburdened communities or vulnerable populations potentially affected by the action who were not engaged and explain why not.

Ecology conducted outreach to local health jurisdictions and Tribal health leaders, but didn't specifically engage vulnerable populations like populations with higher asthma or cancer rates.

4. Summarize recommendations from members of overburdened communities and vulnerable populations to mitigate or eliminate potential harms from the action and/or equitably distribute benefits from the action.

During the outreach and engagement efforts to support this action, Ecology heard the following suggestions to equitably distribute benefits from the action.

- Have clearer messaging regarding compliance for small businesses.
- Continue focused outreach at community events, with community-based organizations, and business owners.
  - Cosmetic products are highly personal, cultural, and can be a sensitive topic for people. In recognition of this, we can personalize messaging when working with communities. We can:
    - Consider the images and language we use in materials and content.
    - Craft messages that are specific and culturally relevant to the group we're engaging.
  - Integrate an understanding of power dynamics in our engagement,
     remembering the inherent power dynamics and history of racism regarding regulation of hair products and treatments. We can:
    - Acknowledge the limitations of this rulemaking and the potential impacts on the availability or performance of cosmetic products.
    - Expect, accept, and acknowledge discomfort around the dynamic of a majority White team of Ecology staff engaging with the Black community.
    - Continue seeking collaborations with key members of the community to inform them on new research, guidance, and safer alternatives.
- Uplift and learn from community members about natural and safer cosmetic
  products that members of the public make themselves, compared to only
  promoting certified safer products they can purchase. Promote safer cosmetic
  products and ingredients, health standards for hair salons, research, and testing
  of new cosmetic products.

 Provide cosmetologists with information on safer and affordable alternative cosmetic products, especially for Black women's hair. All cosmetologists surveyed from our focus group are aware of harmful ingredients, like formaldehyde, which is found in many cosmetic products they use. They tend to avoid products exceeding accepted exposure levels. The main concern we heard from focus group cosmetologists was finding safer and affordable alternative cosmetic products.

# 5. Describe any plans for ongoing engagement with overburdened communities and vulnerable populations related to this action.

As capacity allows, we will continue to engage communities through continued partnerships with a variety of organizations. We intend to:

- Maintain relationships with groups like Breast Cancer Prevention Partners and their Non-Toxic Black Beauty Project.
- Collaborate with platforms like Reign of Style.
- Connect with beauty schools and community-based organizations.
- Conduct outreach with communities underrepresented in typical cosmetology research and product studies such as LGBTQ+, drag community, men of color, and others.
- Create workshop opportunities and attend in-person events, such as community fairs and festivals, especially in locations with communities who face higher toxic exposure or who experience other environmental and health disparities.
- Attend Tribal conventions and events.

# Section 8: Potential Environmental Benefits and Harms from Action

This section summarizes anticipated benefits and harms from the potential action and assesses impacts on overburdened communities and vulnerable populations. The level, type, and form of engagement is based on the likelihood that the actions may cause environmental harm or may affect the equitable distribution of environmental benefits to an overburdened community or a vulnerable population. Answers to the questions in this section may have helped in strategizing our approach to engagement.

### Identify potential environmental benefits & harms from action

1. Describe the anticipated benefits (direct and/or indirect) from this action.

A wide variety of cosmetic products contain formaldehyde-releasing chemicals, which typically act as preservatives and cross-linkers. Toxic chemicals are introduced into the environment through use and disposal of cosmetic products (Lubliner et al., 2010).

The adopted rule will improve human health and the environment by reducing formaldehyde exposure for people who use cosmetic products, as well as reducing the amount of formaldehyde and formaldehyde-releasing chemicals that enter the environment upon product disposal.

### 2. Who will primarily benefit from this action?

People who use cosmetic products, especially:

- Women of color and Black women who are disproportionately exposed to cosmetic products such as hair straighteners or smoothers.
- Salon workers who are exposed to formaldehyde and formaldehyde-releasing chemicals at work.
- Employees of companies that manufacture, distribute, sell, or use cosmetic products.
- 3. How is the action expected to benefit specifically overburdened communities or vulnerable populations? If there is no benefit, identify potential barriers to benefitting from the action.

Women of color are disproportionately exposed to formaldehyde and formaldehydereleasing chemicals in cosmetic products and treatments. The adopted rule should reduce health disparities because the restrictions will reduce their exposure to formaldehyde and formaldehyde-releasing chemicals.

Salon workers are frequently exposed to formaldehyde and formaldehyde-releasing chemicals at work, due to their occupation. In some areas, salon employees may be dominantly people of color. People of color already experience higher exposure to toxic chemicals and pollution. For example, in California almost three-quarters of

licensed manicurists are Vietnamese (Huynh et al., 2024; OSHA, n.d). The adopted rule should lower salon workers' toxic exposure and reduce health disparities they face.

Employees at facilities that manufacture cosmetic products or ingredients used in cosmetic products may be exposed to formaldehyde and formaldehyde-releasing chemicals. Manufacturing facilities may be located in historically industrialized areas, adding toxic pollution and exposure to overburdened communities. The adopted rule aims to lower toxic exposure during the manufacturing process and improve health outcomes.

Data and research show that members of overburdened communities and vulnerable populations regularly face compounded environmental health challenges. Disparities in resources, such as access to good indoor air or water quality, or healthcare or health information, make them more vulnerable to negative cumulative health impacts (Morello-Frosch, et al. 2011). The restrictions in this rule will help improve health outcomes in these communities by reducing toxic chemical exposure.

The adopted rule requires cosmetic products manufactured in Washington State to meet new restrictions. New restrictions may cause manufacturers to reformulate products with safer chemicals. We anticipate the adopted rule will also improve indoor and outdoor air quality and reduce environmental pollution from cosmetic products containing toxic chemicals. This helps improve environmental and working conditions and health outcomes for vulnerable populations.

### 4. Describe anticipated harms (direct and/or indirect) from this action.

The adopted rule may change the availability or performance of cosmetic products that currently use formaldehyde or formaldehyde-releasing chemicals. Individuals who use cosmetic products may have to seek alternative products or treatments that may be unavailable to them or potentially at increased price points. Brands and manufacturers with cosmetic products that contain formaldehyde and formaldehyde-releasing chemicals will need to reformulate their products in order to make, sell, or distribute them in Washington State. This may result in a change in the availability of products that people purchased in the past, the products may perform differently (better or worse), and the product price may be different (higher or lower). Any potential changes may impact consumers, retailers, cosmetologists, distributors, and manufacturers of cosmetic products in Washington State.

Individuals may use specific cosmetic products to meet cultural beauty standards (Ecology, 2023). In the United States, cultural beauty standards typically value attributes associated with whiteness. People may use skin lighteners and hair relaxers or straighteners to meet these standards (Zota and Shamasunder, 2017). While there are alternative methods for straightening or relaxing hair, there are no drop-in safer alternatives for formaldehyde and formaldehyde-releasing chemicals that function as hair straighteners or relaxers.

Formaldehyde and formaldehyde-releasing chemicals are most commonly used to preserve cosmetic products. There are cosmetic products at various price points that

use safer preservatives. Formaldehyde and formaldehyde-releasing chemicals can also be used as cross-linkers to straighten hair. There are some hair straightening and smoothing products advertised as formaldehyde-free. We don't know if these formaldehyde-free products are safer, because we don't know what manufacturers are using instead of formaldehyde for this function. There is research happening to find out what is being used and to identify safer alternatives.

Limiting availability of certain cosmetic products may reduce some individuals' abilities to express their personal, cultural, and other elements of their identity. Lack of access to hair straightening or smoothing methods could result in some individuals facing increased social judgement or negative biases in locations or workplaces with cultures that value straighter hair.

While restrictions on formaldehyde and formaldehyde-releasing chemicals may change product availability or performance, the adopted rule doesn't ban cosmetic products. Manufacturers, distributors, and retailers can offer cosmetic products and treatments that are reformulated without chemicals prohibited in the adopted rule or the authorizing statute (Chapter 70A.560 RCW).

### 5. Who will primarily experience the harms?

- People who use cosmetic products with formaldehyde and formaldehydereleasing chemicals.
- Manufacturers, retailers, and distributors of cosmetic products.

# 6. Describe how the action may harm overburdened communities or vulnerable populations? Be as specific as possible.

Although women of color will likely benefit from this action, some of these harms may primarily affect women of color.

Cosmetic products are personal, cultural, and used by many to achieve a desired appearance and identity or meet certain societal standards. For example, women of color with textured hair have historically altered their appearance to conform to reinforced white beauty standards (Abrams et al., 2020). They often achieve this by using cosmetic products. Without reformulation of cosmetic products to meet new restrictions, some products may become unavailable to people in Washington State. Lack of access to certain cosmetic products may result in some individuals facing social judgement or negative biases.

Many small businesses, such as hair salons and nail salons, serve and are owned by women of color. In California, for example, most nail salons are small operations with ten or less employees, with a predominantly self-employed immigrant workforce (Huynh et al., 2024). This action could potentially limit consumer choice, particularly during the time needed for manufacturers to reformulate products to comply with the adopted rule and the Toxic-Free Cosmetics Act. This could affect vulnerable populations, including workers exposed to environmental harms, people of color, and people with lower incomes.

### 7. Describe how the action would address environmental and health disparities.

Restricting certain cosmetic products with formaldehyde and formaldehyde-releasing chemicals will improve the health and well-being of people in Washington State, particularly people with disproportionately higher toxic exposure. Formaldehyde can cause cancer, harm brain function, increase the risk of asthma, irritate eyes and skin, and cause allergic reactions. Salon workers may be chronically exposed to these chemicals by inhalation, ingestion, and skin absorption (Huynh et al., 2024).

Cosmetic products can release formaldehyde and other chemicals into the environment. For example, cosmetic products brought to landfills may have toxic chemicals that enter landfill leachate and travel to groundwater. When cosmetic products are washed down sinks and drains, toxic chemicals may enter our waterways. Traditional treatment methods used at wastewater treatment plants may not remove all toxic chemicals (Lubliner et al., 2010).

People with lower incomes or who are members of certain racial or ethnic groups are exposed more frequently to multiple environmental and social risk factors (Morello-Frosch et al., 2011). These individuals experience poorer health outcomes overall, and the use of cosmetic products containing hazardous chemicals may worsen health outcomes. For example, studies on chemicals in cosmetic products have shown health disparities for endocrine-related diseases (James-Todd et al., 2016) and asthma prevalence (CDC, 2020) in Black people compared to White people. Black women also have higher incidences of breast cancer in women younger than 45 years of age compared to White women, with Black women more likely to die of breast cancer (Yedjou et al., 2019).

In the United States, cultural beauty standards typically value attributes associated with whiteness. Individuals may use specific cosmetic products to meet these cultural beauty standards, resulting in the use of skin lighteners and hair relaxers or straighteners (Zota and Shamasunder, 2017). Hair straightening products are known to contain formaldehyde and formaldehyde-releasing chemicals, and the use of these products by Black women has been associated with a higher breast and uterine cancer risk (Eberle et al., 2019; Chang et al., 2022).

We anticipate women of color who use cosmetic products and people who work in the cosmetics or cosmetology industry will experience the greatest benefits. This rule will reduce exposure to toxic chemicals and may improve health outcomes. Individuals who own or are employed by a cosmetics business, or work in or live near a cosmetic manufacturer, may see reduced occurrences of cancer, asthma, or skin reactions.

The restriction on formaldehyde and formaldehyde-releasing chemicals will encourage innovation and the development of safer alternatives for cosmetic products. We anticipate this action will result in environmental benefits by reducing pollution. Environmental benefits could be compounded for areas with a density of salons, other cosmetic businesses, and facilities that manufacture cosmetic products and ingredients used in cosmetic products.

# Section 9: Options to Eliminate, Reduce, or Mitigate Harms and Equitably Distribute Benefits

This section summarizes options identified for eliminating, reducing, or mitigating harms, as well as options for equitably distributing anticipated benefits. The answers in this section are informed by engagement, answers from the previous subsections, and any legislative or regulatory boundaries that limit possible decision making.

# Identify options to eliminate, reduce, or mitigate harms & equitably distribute benefits

1. Describe options to reduce, mitigate, or eliminate the identified probable harms to overburdened communities and vulnerable populations. Describe options to equitably distribute the benefits.

Ecology will continue to conduct outreach, provide engagement opportunities, and improve efforts to equitably distribute benefits of the adopted rule. Our outreach efforts will continue to focus on the holistic health impacts of toxic chemicals in cosmetic products and how the restrictions affect people as individual consumers, manufacturers, and business owners.

We're exploring the following options.

- Creating market drivers to increase the availability of safer cosmetic products.
- Continuing product research and innovation.
- Improving and focusing outreach and engagement for people experiencing higher exposure to toxic chemicals.
- Providing technical assistance and compliance support.
- 2. Describe methods chosen for this action to reduce, mitigate, or eliminate the identified probable harms to overburdened communities and vulnerable populations. Describe methods chosen to equitably distribute the benefits.

We plan to use the following methods to reduce potential harms discussed in earlier sections.

- Create market drivers to increase safer product availability.
  - Implement the Safer Salon Partnership, our technical assistance and reimbursement initiative for qualifying cosmetologists, to reduce financial barriers and business risks in switching to safer cosmetic products.
  - Implement the Safer Certification Subsidy, our technical assistance and reimbursement initiative for qualifying manufacturers, to reduce financial and technical barriers to reformulate cosmetic products with safer ingredients.
  - Focus outreach and engagement for our initiatives in communities and areas with disproportionate exposure to toxic chemicals.

- Prioritize businesses and brands that manufacture cosmetic products in Washington State or provide cosmetic services and treatments to people in Washington State.
- Continuing cosmetic product research and innovation.
  - Include vulnerable populations and overburdened communities in the sharing of information, new research, and development of alternatives and cosmetic product options.
  - Collect consumer preferences on cosmetic product types, brands, and treatments to identify and promote development of safer alternatives that are free of formaldehyde and formaldehyde-releasing chemicals.
  - Use data-driven decision-making that considers how intersections of race, occupation, socio-economic status, and product use can exacerbate exposure in vulnerable populations.
- Improve and focus outreach and engagement for people experiencing higher exposure to toxic chemicals.
  - Improve our understanding of the cultural importance of cosmetic products in different communities and the beauty justice movement, such as finding safer alternatives for hair straightening products.
  - Conduct outreach and awareness campaigns with identified vulnerable populations at events in overburdened communities and at Tribal events, and use an informed, anti-racist approach to our outreach and engagement.
  - Promote information sharing and resources on safer alternatives and ingredients, including materials developed from Safer Products for Washington and our Tiers to Safer.
  - Partner with community-based organizations to co-develop and co-create workshops and content on toxic-free cosmetic products that are culturally relevant and in their preferred language.
  - O Prioritize outreach and engagement with vulnerable populations facing the most disproportionate exposure to toxic chemicals, as discussed in previous sections. Engage with communities to co-develop resources that they could give to employees, employers, or leave in their workplaces to highlight the toxic impacts of hair straighteners and promote natural hair as a professional option.
- Provide technical assistance and compliance support.
  - o Provide clear messaging on compliance with the rule.
  - Provide technical assistance to small manufacturers on compliance, reformulation, and safer certification programs.

In addition to these methods, we plan to periodically evaluate the implementation of our program and initiatives. We may collect feedback from subsidy recipients, members of the public, or other interested parties. This will help us determine barriers, elements we can improve, and ways to further support what is working well.

3. If the agency determines it does not have the ability or authority to eliminate, reduce, or mitigate environmental harms caused by the action, or address the equitable distribution of environmental benefits, explain why that determination was made.

Ecology doesn't anticipate environmental harms from this action. For more details about Ecology's assessment of environmental impacts from this rulemaking, see the SEPA Determination of Nonsignificance and Environmental Checklist. 17

<sup>&</sup>lt;sup>17</sup> https://apps.ecology.wa.gov/separ/Main/SEPA/Record.aspx?SEPANumber=202500450

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