



Dear Department of Ecology,

Thank you for Washington's leadership in prioritizing public health by banning cancer-causing chemicals in personal care products and cosmetics. The state's commitment to protecting consumers and workers, particularly salon professionals, is commendable.

Women's Voices for the Earth (WVE) strongly supports the Department of Ecology's draft rule to ban formaldehyde and formaldehyde releasers in cosmetics. This rule is a critical step in making products used on our skin, in our hair, and those that get flushed down the drain safer for everyone. WVE has a long history of calling on the Food and Drug Administration to take action on its proposed ban on formaldehyde in hair straighteners products. Given that agency's repeated delays and reduced capacity, state-level action is urgently needed.

Formaldehyde is linked to cancer, respiratory issues, and other chronic health conditions. It has no place in the products we use daily or in our workplaces. Salon workers, particularly Black, Latina, and immigrant women, are disproportionately affected by long-term exposure to formaldehyde, putting them at higher risk for health problems. We strongly support Washington's bold action to protect both consumers and these vulnerable workers.

We would like to specifically highlight and strongly support the following aspects of the proposed rule:

- The ban on the list of 28 formaldehyde releasers is set to take effect on January 1, 2027. This list will be instrumental in reducing widespread exposure to these harmful chemicals.
- The clear definition of "intentionally added" formaldehyde, which ensures that formaldehyde or formaldehyde releasers added at any point in the production process will be covered under the rule, thereby closing potential loopholes.
- The strong enforcement provisions, which stipulate that there will be an assumption that formaldehyde or a restricted formaldehyde releaser has been intentionally added if formaldehyde is detected during sampling. This proactive stance is crucial for ensuring compliance and protecting public health.

We especially appreciate that several ingredients were included as formaldehyde releasers "when used in heat-activated hair straighteners." We would like to offer information on additional chemicals used in hair products commonly exposed to high heat flat irons that also release formaldehyde.

Specifically, we recommend that cyclopentasiloxane and dimethicone be added to the WA State list of formaldehyde releasers “when used with high heat styling tools.” Concerns about these ingredients were first brought to our attention by hairstylists whose health had been affected by formaldehyde-containing hair straightening products, who later discovered they experienced similar adverse respiratory and neurological symptoms to flat iron sprays (also known as thermal protection sprays) even though these products did not list formaldehyde as an ingredient. Flat iron sprays (also called thermal protection sprays) are designed to be sprayed on wet or dry hair immediately before use of a high heat flat iron or curling iron, with the intent to protect the hair shaft from adverse effects from the heat. Flat irons and curling irons commonly heat at temperatures up to 450 degrees F.

Flat iron sprays commonly include cyclopentasiloxane and dimethicone as major ingredients. Both of these ingredients are known to emit formaldehyde when heated over 300 degrees F. We refer to the following manufacturer Safety Data Sheets, which clearly state the formaldehyde-releasing hazards of exposing these chemicals to heat above 300 degrees F.

- GE Silicones Material Safety Data Sheet for Cyclopentasiloxane: *“Attention: This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard.”* Source: <https://www.nyc.gov/assets/dep/downloads/pdf/air/non-perc-ge-silicones-sb-32-green-earth-cleaning-safety-sheet.pdf>
- MakingCosmetics Dimethicone 500 Safety Data Sheet: *“Precautions for safe handling: When heated to temperatures above 150°C (304°F) in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Keep vapor concentrations within the OSHA permissible exposure limit for Formaldehyde.”* Source: <https://www.makingcosmetics.com/on/demandware.static/-/Sites-makingcosmetics-master/default/dwf99e3fb4/msds/sds-dimethicone-500.pdf>
- GE Silicones also issued a report in 1999 titled “Regarding the Evolution of Formaldehyde from Polydimethylsiloxanes.” [https://web.archive.org/web/20240615215854/https://imageserv5.team-logic.com/mediaLibrary/99/Formaldehyde Generation - GE Silicones.pdf](https://web.archive.org/web/20240615215854/https://imageserv5.team-logic.com/mediaLibrary/99/Formaldehyde%20Generation%20-%20GE%20Silicones.pdf)

Despite these warnings from ingredient manufacturers, these chemicals are commonly included in flat iron and thermal protection sprays and recommended to be used with high heat. For example, marketing materials for these products state:

- *“Silk Elements MegaSilk™ Olive Heat Protection Spray helps to protect hair from damage caused by heat styling, leaves hair soft and silky, while providing incredible shine. How to use: Spray on damp hair prior to drying, or spray on dry hair prior to using a heat styling appliance. Ingredients: **CYCLOPENTASILOXANE**, NEOPENTYL GLYCOL*

DIETHYLHEXANOATE ,**AMODIMETHICONE** ,DIISOPROPYL ADIPATE ,FRAGRANCE ,OLEA EUROPAEA (OLIVE) FRUIT OIL ,WATER ,HYDROLYZED SILK ,POTASSIUM SORBATE ,SODIUM BENZOATE ,ALPHA ISOMETHYL IONONE ,AMYL CINNAMAL ,BENZYL BENZOATE ,BENZYL SALICYLATE ,BUTYLPHENYL METHYLPROPIONAL ,CITRONELLOL ,LINALOOL ,BENZYL ALCOHOL” <https://www.sallybeauty.com/hair-care/shop-by-solution/heat-protection/megasilk-olive-heat-protection-spray/SBS-373268.html>

- “With just a quick spritz of Not Your Mother’s All Eyes On Me™ 10-in-1 Hair Perfector you’ve already managed to control frizz, detangle, moisturize, and protect your hair from 450°F heat.” Ingredients: Water (Aqua), **Cyclopentasiloxane**, Cetearyl Alcohol, Isopentyldiol, Behentrimonium Chloride, Quaternium-80, Glycerin, Punica Granatum Fruit Extract, Hydrolyzed Vegetable Protein, Salvia Hispanica Seed Extract, Trehalose, Xylitol, Caprylyl/Capryl Glucoside, Ethyl Linoleate, Ethyl Oleate, Sorbitan Oleate, Polyquaternium-37, Sodium Phosphate, **Dimethicone**, **Dimethiconol**, **Dimethicone/Vinyl Dimethicone Crosspolymer**, **PEG-10 Dimethicone**, Tetrasodium Glutamate Diacetate, Fragrance (Parfum), Phenoxyethanol, Ethylhexylglycerin, Citric Acid. <https://notyourmothers.com/products/all-eyes-on-me-10-in-1-hair-perfector?srltid=AfmBOoghFviXyysOysbnmQsu0vzmCp5fA80qtUO8gglmeNygKE50Tnlx>

Cyclopentasiloxane and dimethicone would be appropriate additions to the list of formaldehyde releasers “when used with high heat styling tools.” Additionally, we strongly encourage the state to implement clear and transparent labeling requirements for cosmetic products. These labeling requirements will provide consumers with critical information to make informed decisions about the products they purchase. We also encourage clear compliance requirements for manufacturers and distributors, as it is essential that businesses, including those operating online, are held accountable for distributing products that meet health and safety standards.

We appreciate the inclusion of worker protections in the draft implementation plan, particularly for salon workers, who face repeated and high levels of exposure. But we also urge you to ensure that there are provisions for education and outreach efforts that engage beauty professionals, small businesses, and communities most impacted by toxic exposures. These efforts should ensure that those who will be most affected by the ban are well-informed about safer alternatives and how they can transition smoothly without undue economic burden.

Moreover, we strongly support the idea of incentives for businesses to transition to safer alternatives. It would be equally beneficial, however, if the state could also consider providing incentives directly to beauty professionals. By doing so, Washington would ensure that these workers are not economically disadvantaged by the shift toward safer practices. It would also be valuable for the state to consider collaborating with beauty professionals and perhaps forming an advisory committee to ensure that their needs, concerns, and expertise are integrated into the implementation strategies.

We also urge the state to partner with public health and environmental justice organizations to ensure that implementation efforts prioritize communities that are most affected by toxic exposures, including low-income communities and communities of color. This collaboration will help ensure that Washington's efforts to protect public health are as effective and equitable as possible.

Finally, we advocate for ongoing monitoring and reporting to assess the effectiveness of the rule in reducing harmful exposures over time. It is essential to evaluate whether the rule is successfully protecting public health and adjust as needed.

In conclusion, we strongly support the proposed rule to restrict formaldehyde and formaldehyde-releasing agents in cosmetic products. We also encourage the Department of Ecology to expand the list of formaldehyde releasers to include cyclopentasiloxane and dimethicone. We thank the Department of Ecology for its commitment to consumer and worker safety, and we urge the state to continue working closely with stakeholders to ensure the successful implementation of this crucial policy.

Sincerely,

A handwritten signature in black ink, appearing to read "Jayla Burton", with a long horizontal flourish extending to the right.

Jayla Burton MPH, MS
Director of Programs
Women's Voices for the Earth