



Department of
Environmental
Conservation

1,4-Dioxane Limits for Household Cleansing, Personal Care, and Cosmetic Products

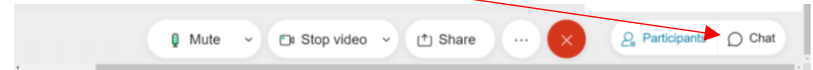
November 18, 2020

Meeting Procedures

Reminders:

1. Attendees will be muted upon entry.
2. After each segment, the presenter will respond to questions from attendees using the "Chat" feature. To ask a question, attendees should type their question to "Panelists". DEC panelists will answer as many questions as time allows.
3. Call in users will not be able to participate in the "Chat" sessions.

Note: If technical problems arise, please contact the NYSDEC at 518-402-8044.



How To Make Written Comments

Written comments on the information presented proposed rule may also be submitted after the webinar by email or by USPS mail.

To send written comments mail to: Emily Dominiak – Bureau of Waste Reduction and Recycling, 625 Broadway, Albany, NY 12233-7253 or Email comments to: 1-4D.HCPCproducts@dec.ny.gov



Agenda

- Welcome and Opening Remarks
- ECL Article 35 and 37 Revisions
- The Current State of 1,4-Dioxane in Covered Products
- Ideas on:
 - Product Scope and Categories
 - Applicability to Concentrated Products
 - Waiver: Process, Applicability, and Meaning
- Wrap Up and Next Steps



Revisions to ECL Articles 35 and 37

Environmental Conservation Law Article 35

- Added subdivisions 4-7 to § 35-0105
- Applies to household cleansing products

Environmental Conservation Law Article 37

- Added § 37-0117
- Applies to personal care and cosmetic products

Requirements in Both

- DEC must review, with DOH, the stated thresholds no later than May 1, 2025 and every two years after
- A manufacturer may apply for up to two, one-year waivers of the requirements



1,4-Dioxane Limits

Household Cleansing and Personal Care Products

2 ppm by 12/31/22

1 ppm by 12/31/23



Cosmetic Products

10 ppm by 12/31/22



1,4-Dioxane in Cleaners, Personal Care Products & Cosmetics

Kate Winnebeck, NYS Pollution Prevention Institute

November 18, 2020



NYS Pollution Prevention Institute

- HQ at RIT
- Established in 2008
- \$3.9M in annual NYS funding administered through the NYS Department of Environmental Conservation
- Focus areas include:
 - Sustainable Manufacturing Assessments
 - Supply Chain Sustainability
 - Technology Commercialization
 - Food Waste Diversion
 - Outreach & Education
 - Research & Development
 - Emerging Contaminants

Goal

- **Analyze a set of cleaning, personal care, and cosmetic products in order to**
 1. Identify the product categories that may contain significantly high levels of 1,4 dioxane
 2. Identify the product categories that typically contain 1,4 dioxane below 1ppm, between 1-2ppm, and above 2ppm
- **NYSP2I and NYSDEC collaboration with California DTSC to create a robust data set**
- **313 products analyzed for 1,4 dioxane content**
 - 148 cleaning, 105 personal care & 60 cosmetics

Selecting products

- **Specific *product categories* were prioritized for analysis based on**
 - (1) data found in literature - or lack thereof
 - (2) cleansing and/or foaming characteristic, and
 - (3) prolific use
- **Specific *products* were categorized to ensure broad representation:** (1) best selling, (2) discount/store brand, (3) sold at discount store, (4) marketed to minorities, (5) has a third party environmental ecolabel, (6) marketed as “safer”, and (7) marketed to kids/teens

Method

- **Consumer products were purchased off the shelf**
 - 28 laundry detergents purchased & analyzed in 2018
 - Remaining 285 products purchased & analyzed in 2020
- **Cleaning products include concentrates and institutional products**
 - Concentrated product data represents the product as purchased
 - Dilution is excluded from this analysis as it is based on use
- **Product samples were analyzed in NY by Clarkson University using GC/MS (gas chromatography/mass spectrometry) and by CA DTSC**
- **Results represent a preliminary data set to get an idea of concentrations seen across product categories**

Cleaning Products analyzed

Product category	Number products analyzed	Detection range (ppm)	Detection median (ppm)
Dish cleaning – manual	16	ND – 30	2.5
Dish cleaning – automatic	10	ND – 0.2	ND
Laundry detergent	64	ND – 21	1.5
Surface cleaners	49	ND – 7.6	ND
Toilet cleaning products	9	ND – 0.4	ND
I/I cleaning products (also included above)	34	ND – 23.1	ND
Concentrated products (also included above)	38	ND – 6.0	ND

Personal Care & Cosmetics Products analyzed

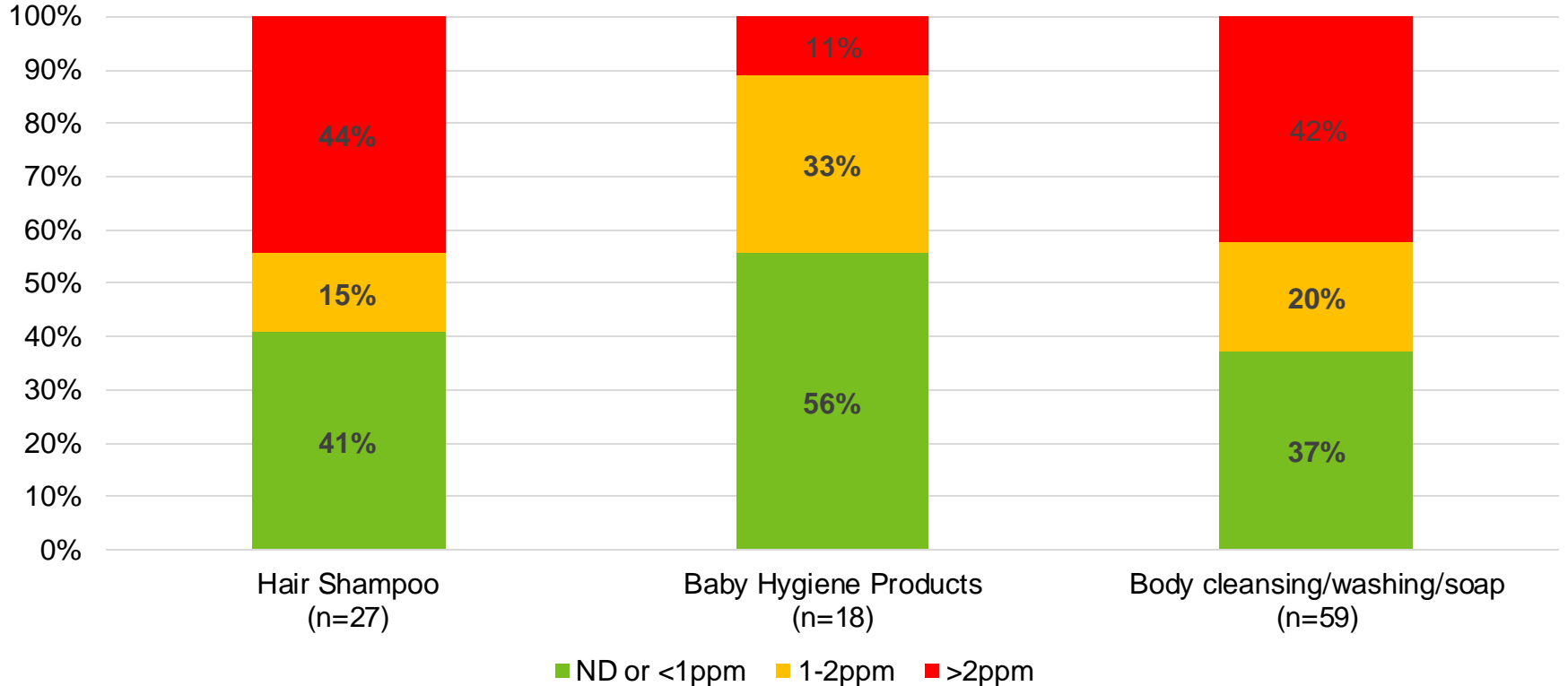
Product category	Number products analyzed	Detection range (ppm)	Detection median (ppm)
Hair – shampoo	27	ND – 39.2	1.5
Cleansing/washing/soap – body	60	ND – 12.8	1.8
Baby hygiene products	18	ND – 15	0.5
Cosmetics – complexion	10	ND – 0.1	ND
Cosmetics – eyes	10	ND	ND
Cosmetics – lips	10	ND	ND
Shaving preparations	10	ND – 0.1	ND
Skin care / Moisturizing products	7	ND	ND
Toners / astringents	3	ND – 0.7	ND
Acne treatments	10	ND – 0.1	ND

Cleaning product results

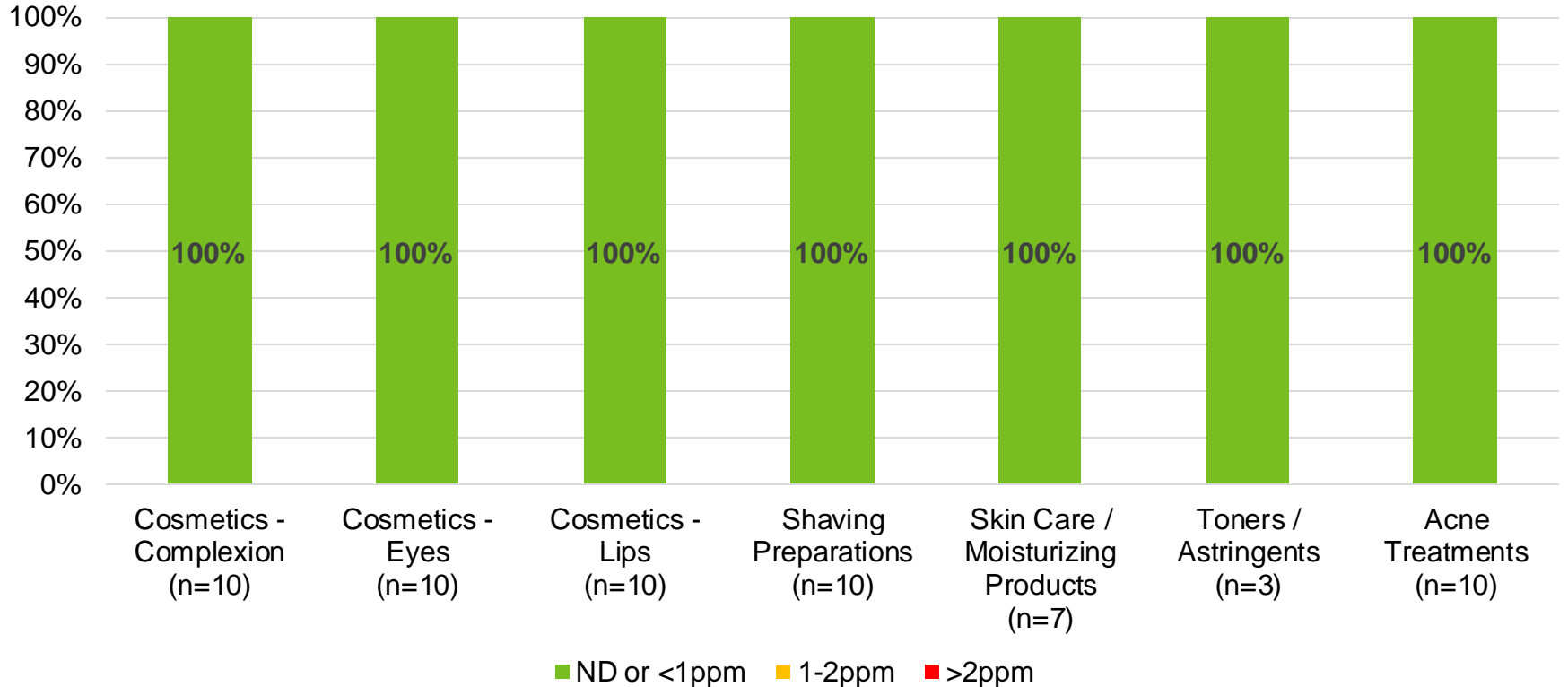


*Concentrated & I/I Products are also included in the other product categories

Personal Care Product Results



Cosmetic Product Results



Product Categories of Concern

Product category	% products above 1ppm	trends
Manual dish soap	69%	<ul style="list-style-type: none"> • Includes name, store & discount brands • Includes ecolabeled products • One I/I product
Body cleansing	62%	<p>Subcategories with significant portion of products >1ppm:</p> <ol style="list-style-type: none"> 1. Hand soap (7/18 >2ppm, 12/18 >1ppm) 2. Body wash (7/14 >2ppm, 11/14 >1ppm) 3. Facial wash (6/10 >2ppm, 4/10 <1ppm) 4. Potentially bubble bath – small data set
Shampoo	59%	Includes name, discount & premium/higher end brands
Laundry detergent	53%	<ul style="list-style-type: none"> • Both concentrated & non-concentrated formulas • Includes name, store & discount brands • 9/10 ecolabeled products below 1ppm

Thank You



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Product Scope and Categories

Household Cleansing Products - Definition

ECL § 35-0103(1)

"Household cleansing product" means any product, including but not limited to soaps and detergents, containing a surfactant as a wetting or dirt emulsifying agent and used primarily for domestic or commercial cleaning purposes, including but not limited to, the cleansing of fabrics, dishes, food utensils and household and commercial premises. Household cleansing product shall not mean foods, drugs, cosmetics, insecticides, fungicides and rodenticides or cleansing products used primarily in industrial manufacturing, production and assembling processes as provided by the commissioner by rule and regulation.

6 NYCRR Part 659

Household cleansing product shall mean any product, including but not limited to, soaps and detergents containing a surfactant as a wetting or dirt emulsifying agent and used primarily for domestic or commercial cleaning purposes, including but not limited to the cleansing of fabrics, dishes, food utensils and household and commercial premises. Household cleansing product shall not mean:

- (1) foods, drugs and cosmetics, including personal care items such as toothpaste, shampoo and hand soap;
- (2) products labeled, advertised, marketed and distributed for use primarily as pesticides, as defined in article 33 of the Environmental Conservation Law.



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Household Cleansing Products - Interpretation

DEC interprets this to cover:

- Any product containing a surfactant meant to clean or cleanse
- Consumer and commercial/ institutional, but not industrial
- Concentrated versions of these products

Household Cleansing Products - Categories

- Descalers
- Dish Cleaning/ Care- Automatic
- Dish Cleaning/ Care- Hand
- Drain Treatment/ Pipe Unblockers
- Stain Removers
- Surface Cleaners
- Toilet Cleaners
- Laundry Detergents
- Laundry Dry Cleaning

Personal Care Products - Definition

ECL § 37-0117(2)

The term "personal care product" shall mean any product intended for cleaning or cleansing any part of the body, such as the skin and hair, and including but not limited to, hair shampoo, hair conditioner, soap, bath gels and other bath products. The term "personal care product" shall not include any product for which a prescription is required for distribution or dispensation as provided in section two hundred eighty-one of the public health law or section sixty-eight hundred ten of the education law.

Personal Care Products - Interpretation

DEC interprets this to cover:

- Any product meant to clean or cleanse the body
- All types of markets including consumer and commercial/institutional
- Concentrated versions of these products

Personal Care Products - Categories

- Nail Cleansers/ Cosmetic Removers
- Hair Conditioner/ Treatments
- Hair Shampoo
- Ear/ Nasal Cleaners
- Dental Cleansers
- Denture/ Orthodontic Cleansers
- Bath Additives
- Cleansing/ Washing/ Soap-Body
- Personal Wipes
- Cleansers/ Cosmetic Removers
- Baby Hygiene Products

Cosmetic Products - Definition

ECL § 37-0117(1)

The term "cosmetic product" shall mean any article (a) intended to be rubbed, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body or any part thereof for beautifying, promoting attractiveness, or altering the appearance, and (b) intended for use as a component of any such article. The term "cosmetic product" shall not include any personal care product as defined in this section for which a prescription is required for distribution or dispensation as provided in section two hundred eighty-one of the public health law or section sixty-eight hundred ten of the education law.



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Cosmetic Products - Interpretation

DEC interprets this to cover:

- Any product meant to alter or enhance the appearance of the human body
- Excludes anything meant to clean
- All types of markets including consumer and commercial/institutional
- Concentrated versions of these products

Cosmetic Products - Categories

- Cosmetic Paints, Shimmers, Glitters
- Cosmetics – Face/ Complexion (coverup, blush, highlighter, etc.)
- Cosmetics – Eyes (liner, mascara, shadow, etc.)
- Cosmetics – Lips (liner, lipstick, etc.)
- Cosmetics – Nails
- False Eyelashes and Adhesives
- False Nails and Adhesives
- False Hair and Adhesives
- Perfume
- Hair Dye
- Hair Perming
- Hair Styling (mouse, spray, gel, etc.)
- Hair Bleaches/ Lighteners
- Hair Removers
- Hair Removal Care
- Shaving Preparations
- After Shave Care
- Breath Fresheners/ Mouth Rinses
- Anti-spot aids
- Exfoliants/ Masks
- Acne Treatments
- Lip balms
- Skin Care
- Toners/ Astringents
- Skin Tanners/ Sunless Tanning
- Sun Tan Accelerators
- After-Sun Moisturizers
- Skin Lighteners

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Ambiguous Product Categories

Some types of products do not neatly fit into either statutory definition.

- Body lotion
- Sunscreen
- Deodorant

These products are unlikely to contain 1,4-dioxane in excess of the statutory limits.

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Applicability to Concentrated Products

- Concentrated products contain more surfactant and therefore can have higher levels of 1,4-dioxane.
- Meet other environmental objectives such as producing less packaging waste, using less water, and emitting lower GHGs from transportation
- We will be seeking input on how to address and evaluate concentrated products in the implementation of the law.

Waiver: Process, Applicability, and Meaning



Waiver – Statutory Language

ECL § 35-0105(6) and § 37-0117(7)

A **manufacturer** of a product, otherwise subject to the requirements of this section, may apply to the department for a one-year waiver from such requirements **for a specific product**, and upon such **proof** that the manufacturer has taken steps to reduce the presence of 1,4-dioxane in that product and is unable to comply with the requirements of this section. Thereafter, a manufacturer may apply for one additional one-year waiver for such product, upon the satisfaction of such similar proof.

Manufacturer

Any person who

1. manufactures a covered product
2. distributes a covered product under their name; or
3. is the distributor for a product manufactured abroad.

Submitting a Waiver

Applications for a waiver may be submitted on a company scale but must name each product, including different fragrance blends, to which the waiver will apply.

DEC will publish documents that manufacturers should use to submit their application. These may include:

- A spreadsheet to list products and other required information
- A form to explain why products cannot meet the statutory limits
- A form to be signed by a responsible official certifying the truth, accuracy, and completeness of the submitted information

Proof DEC is Considering

1. Certified statement of the amount of 1,4-dioxane contained in the product currently. Such information can be obtained as a result of:
 - a) testing conducted on the finished product
 - b) a dilution calculation based on ingredient concentration

2. Certified written explanation of the efforts that have been or are being conducted to reduce the amount of 1,4-dioxane in the product.



Anticipated Waiver Timeline

- Applications can be submitted as early as October 1, 2021
- Reviewed on a rolling basis in the order in which they are received.
- DEC will work to approve or deny an application within six months of receipt.

Receiving a Waiver

- Once approved, waiver documents will be published on DEC's website, less any information the manufacturer claims is confidential.
- Waivers allow the manufacturer and retailers to continue sale of the noncompliant product in New York while the waiver is in effect.

Waiver Renewal

- Submit updated versions of the documentation provided to receive the initial waiver
- Indicate that such application is for a waiver renewal
- Applications for waiver renewal submitted in the third quarter of the effective timeframe of the initial waiver

Next Steps

**Virtual Public Meeting
December 2, 2020 at 2 pm**



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Thank You

- Emily Dominiak
Project Lead

Inquires:

1-4D.HCPCCproducts@dec.ny.gov

518-402-8706

Website:

dec.ny.gov/chemical/121658.html



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