Regulatory Strategies
Work Group Meeting for:

- Hair Care Products
- Manual Aerosol Air Fresheners
- Personal Fragrance Products < 20% Fragrance
- Sunset of 2% Fragrance Exemption
- Topics for March 19, 2020 Work Group Meeting
- Next Steps

March 10, 2020
9:00am-12:00pm
Hair Care Products
Draft Proposal Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Existing Limit</th>
<th>Applicable Jan 1, 2023</th>
<th>Applicable Jan 1, 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Draft Proposed Limit</td>
<td>VOC Reductions (tpd)</td>
</tr>
<tr>
<td>Hair Finishing Spray</td>
<td>55%</td>
<td>50%</td>
<td>1.1</td>
</tr>
<tr>
<td>Dry Shampoo</td>
<td>NA</td>
<td>50%</td>
<td>0.7</td>
</tr>
</tbody>
</table>

- We will discuss the following today:
  - “Hair Finishing Spray”, “Dry Shampoo”, and “Hair Styling Product” Definitions
  - “Temporary Hair Color” and “Hair Shine”
Hair Care Products Definitions
Draft Potential Hair Finishing Spray
Definition Update

“Hair Finishing Spray” means a consumer product that is designed or labeled for application to styled hair to provide sufficient rigidity, to hold, retain or finish the style of the hair for a period of time once styling is complete. “Hair Finishing Spray” and includes aerosol hair sprays, pump hair sprays, spray waxes; color, glitter, or sparkle hair spray products that make finishing claims; and products that are labeled for both a hair styling and finishing product. “Hair Finishing Spray” does not include spray products labeled for hair that are intended to aid in styling but do not provide labeled for finishing of a hairstyle.

For the purposes of this subchapter, “finish” or “finishing” means the maintaining and/or holding of previously-styled hair for a period of time a hairstyle once all styling is complete.

For the purposes of this subchapter, “styling” means the forming, sculpting, or manipulating of the hair to temporarily alter the hair’s shape.
Draft Potential Hair Finishing Spray Definition Update (without underline/strikeout)

- “Hair Finishing Spray” means a product that is labeled for application to hair once styling is complete, and includes products that are labeled for both hair styling and finishing. “Hair Finishing Spray” does not include products labeled for hair styling but not labeled for finishing the hair style.

- For the purposes of this subchapter, “finish” or “finishing” means the maintaining and/or holding of a hairstyle once all styling is complete.

- For the purposes of this subchapter, “styling” means the forming, sculpting, or manipulating of the hair to alter the hair’s shape.
Draft Potential Dry Shampoo
Definition Update

“No Rinse Shampoo [Dry Shampoo]” means a product designed or labeled solely to be applied to dry hair that is dry to clean, absorb oil, or eliminate odor, and isto subsequently be removed from the hair by combing, brushing, or toweling the hair.

Note: Leave-in conditioners that make styling claims are currently included in the definition of “Hair Styling Products.” CARB staff’s intent is that this would continue to apply.

As described later in this presentation, staff are also evaluating whether to simplify how ‘Hair Shine’ products that make conditioning claims are categorized.
Draft Potential Hair Styling Product Definition Update

“Hair Styling Product” means a consumer product that is designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling and/or sculpting of the hair. “Hair Styling Product” includes, but is not limited to, hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hair style, and leave-in volumizers, detanglers and/or conditioners that make styling claims. “Hair Styling Product” does not include “No-Rinse Dry Shampoo,” “Thermal Protectant,” “Hair Mousse,” “Hair Shine,” “Hair Finishing Spray,” or shampoos or conditioners that are rinsed from the hair prior to styling.

For the purposes of this subchapter, “finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time a hairstyle once all styling is complete.

For the purposes of this subchapter, “styling” means the forming, sculpting, or manipulating of the hair to temporarily alter the hair’s shape.
Discussion & Questions

For webinar attendees: Please type in questions or comments using the Questions tab on the sidebar.
Temporary Hair Color & Hair Shine
Temporary Hair Color Definition and Regulatory History

- “‘Temporary Hair Color’ means any product that applies color, glitter, or UV-active pigments to hair, wigs, or fur and is removable when washed. ‘Temporary Hair Color’ includes hair color mousses and products labeled to add texture or thickness to cover thinning/balding areas. ‘Temporary Hair Color’ does not include ‘Hair Finishing Spray,’ ‘Hair Styling Product,’ or ‘Hair Mousse.’”

- Regulated at 55% VOC Content (December 31, 2010)
Temporary Hair Color Category Overview

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Companies</td>
<td>11</td>
</tr>
<tr>
<td>Number of Products</td>
<td>149</td>
</tr>
<tr>
<td>Sales Mass (tpd)</td>
<td>0.36</td>
</tr>
<tr>
<td>VOC Emissions (tpd)</td>
<td>0.19</td>
</tr>
<tr>
<td>Sales Weighted Average VOC Content</td>
<td>52.23%</td>
</tr>
</tbody>
</table>
Temporary Hair Color Speciation Breakdown

- VOC: 52.23%
- Exempt: 38.40%
- Inorganic: 6.55%
- Grouped LVP: 2.81%
- LVP: 0.01%
Temporary Hair Color VOC Constituents

- n-Butane: 39.20%
- Isobutane: 16.87%
- Ethanol: 27.98%
- Propane: 15.26%
- Dimethyl Ether: 0.60%
- Other VOCs: 0.09%
Temporary Hair Color VOC Content
## Temporary Hair Color
### Possible VOC Standards

<table>
<thead>
<tr>
<th>Temporary Hair Color</th>
<th>50% Threshold</th>
<th>45% Threshold</th>
<th>40% Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>2027 VOC Tons Per Day Reduced</td>
<td>0.02</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Complying Market Share (Mass)</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Complying Product-Formulations</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Discussion & Questions

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Hair Shine Regulatory History

- Regulated since 1997
- Current VOC standard: 55% VOC by weight
Hair Shine Existing Definition

“‘Hair Shine’ means any products designed for the primary purpose of creating a shine when applied to the hair. ‘Hair Shine’ includes, but is not limited to, dual-use products designed primarily to impart a sheen to the hair. ‘Hair Shine’ does not include ‘Hair Finishing Spray,’ ‘Hair Mousse,’ ‘Hair Styling Product,’ or products whose primary purpose is to condition or hold the hair.”
Draft Potential Hair Shine Definition Update

“‘Hair Shine’ means any product designed for the primary purpose of creating a shine when applied to the hair. ‘Hair Shine’ includes, but is not limited to, dual-use products designed primarily to impart a sheen to the hair. ‘Hair Shine’ does not include ‘Hair Finishing Spray,’ ‘Hair Mousse,’ or ‘Hair Styling Product’ or products whose primary purpose is to condition or hold the hair.”
# Hair Shine

## Survey Category Overview

<table>
<thead>
<tr>
<th>Survey Category</th>
<th>Reported Products</th>
<th>Sales Weighted Average VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hair Shine (Non-Aerosol)</td>
<td>487</td>
<td>7.75%</td>
</tr>
<tr>
<td>Hair Shine (Aerosol)</td>
<td>110</td>
<td>40.52%</td>
</tr>
<tr>
<td>Hair Shine (All Forms)</td>
<td>597</td>
<td>11.01%</td>
</tr>
</tbody>
</table>
Speciation and VOC Breakdown:
Hair Shine (Non-Aerosol)
Speciation and VOC Breakdown: Hair Shine (Aerosol)
Hair Shine VOC Content
VOC Content: Hair Shine (Non-Aerosol)
VOC Content: Hair Shine (Aerosol)
## Hair Shine Possible VOC Standards

<table>
<thead>
<tr>
<th>Hair Shine</th>
<th>Possible Threshold</th>
<th>Possible Threshold</th>
<th>Possible Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>40</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>VOC Tons Per Day Reduced</td>
<td>0.02</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Complying Market Share (Product-Formulations)</td>
<td>79%</td>
<td>86%</td>
<td>88%</td>
</tr>
<tr>
<td>Complying Market Share (Mass)</td>
<td>80%</td>
<td>87%</td>
<td>88%</td>
</tr>
</tbody>
</table>
Discussion & Questions

For webinar attendees: Please type in questions or comments using the Questions tab on the sidebar.
Manual Aerosol Air Freshener
Draft Proposal Summary

<table>
<thead>
<tr>
<th><em>Category</em></th>
<th>Existing VOC Standard</th>
<th><strong>Effective Date: Jan 1, 2023</strong></th>
<th><strong>Effective Date: Jan 1, 2027</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Aerosol Air Freshener</td>
<td>20% or 30%</td>
<td>10%</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*This category is comprised of single and double phase aerosol air freshening products. Excludes automatic aerosol air freshening products.
Section 94508(a)(6)

For products manufactured before January 1, 2023, “Air Freshener” includes the following subcategories (A-C):

(A) “Double Phase Aerosol Air Freshener” means an aerosol “Air Freshener,” with the liquid contents in two or more distinct phases, that requires the product container be shaken before use to mix the phases, producing an emulsion.

(B) “Dual Purpose Air Freshener/Disinfectant” means an aerosol “Air Freshener” that is designed or labeled for use as both a “Disinfectant” and an “Air Freshener,” or is so represented on any sticker, label, packaging, or literature attached to the product container.

(C) “Single Phase Aerosol Air Freshener” means an aerosol “Air Freshener” with the liquid contents in a single homogeneous phase which does not require that the product container be shaken before use.
For products manufactured on or after January 1, 2023, “Air Freshener” includes the following subcategories (A-C):

(A) “Automatic Aerosol Air Freshener” is an aerosol “Air Freshener” that is labeled to be used exclusively in an Automatic Air Freshening Dispenser.”

(B) “Dual Purpose Air Freshener/Disinfectant” means an aerosol “Air Freshener” that is designed or labeled for use as both a “Disinfectant” and an “Air Freshener,” or is so represented on any sticker, label, packaging, or literature attached to the product container.

(C) “Manual Aerosol Air Freshener” means an aerosol “Air Freshener,” that is not an “Automatic Aerosol Air Freshener” or a “Dual Purpose Air Freshener/Disinfectant”.

“Automatic Air Freshening Dispenser” is a device labeled to dispense product at a pre-determined time or interval of time, under preset conditions, or due to sensor-activation.
Discussion & Questions

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Personal Fragrance Products with $\leq$ 20% fragrance
Industry stakeholders have requested that Eau de Parfum/ Eau de Toilette (EDP/EDT) products be exempted from the above draft standards.

CARB staff evaluating whether such an exemption is warranted, possible implementation challenges, and emission reduction implications.
Fragrance Content of Personal Fragrance Product with \(\leq 20\%\) Fragrance
Discussion & Questions

For webinar attendees: Please type in questions or comments using the Questions tab on the sidebar.
Sunset of the 2% Fragrance Exemption
Overview

2013-2015 Consumer Products Survey Scope

- Over 400 survey categories
- 123 survey categories correspond to regulated categories and also include enough formulation data to consider fragrance utilization
- Non-compliant products, aerosol adhesives, personal fragrance products, and 100% fragrance air fresheners were excluded
Methodology

- Regulated products were grouped by category and binned according to VOC and fragrance content
  - Products with VOC content greater than 2% over the limit for their category were excluded
  - Products containing fragrance that were formulated above the VOC limit for their category were considered to be utilizing the exemption
  - Products were binned according to whether they were using the exemption, and averages calculated for each
Methodology cont.

- **Role of Fragrance Speciation Assumptions**
  - Previous and current fragrance speciation assumptions were used to calculate product VOC content and fragrance utilization
  - Example using 25% VOC speciation assumption:
    - Product contains 10% VOC + 2% fragrance
    - Product VOC breakout would be:
      - 0.5% VOC from fragrance
      - 10.0% Other VOC
  - If the category limit is 10% (+ 2% exemption)
    - Product is considered to be using 25% of the exemption
  - If the category limit is 12% (+ 2% exemption)
    - Product is not considered to be using the exemption
Role of Fragrance Speciation Assumptions

- Example using 100% VOC speciation assumption:
  - Product contains 10% VOC, + 2% fragrance
  - Product VOC breakout would be:
    - 2.0% VOC from fragrance
    - 10.0% Other VOC

  - If the category limit is 10% (+2% exemption)
    - Product is considered to be using 100% of the exemption

  - If the category limit is 12% (+ 2% exemption)
    - Product is not considered to be using the exemption
# Two Percent Fragrance Exemption Utilization Summary

<table>
<thead>
<tr>
<th>Regulated Category Group</th>
<th>Zero Fragrance Products</th>
<th>Fragranced Products Not Using 2%</th>
<th>Fragranced Products Using 2% Exemption</th>
<th>% Products Not Using Exemption</th>
<th>% Mass Not Using Exemption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Mass (tpd)</td>
<td>Count</td>
<td>Mass (tpd)</td>
<td>Count</td>
</tr>
<tr>
<td>Household</td>
<td>6391</td>
<td>347.7</td>
<td>10637</td>
<td>397.0</td>
<td>2519</td>
</tr>
<tr>
<td>Personal Care*</td>
<td>904</td>
<td>9.8</td>
<td>4140</td>
<td>39.6</td>
<td>549</td>
</tr>
<tr>
<td>Insecticide, Solvents, and Automotive</td>
<td>2575</td>
<td>198.1</td>
<td>595</td>
<td>17.3</td>
<td>180.0</td>
</tr>
<tr>
<td>Total</td>
<td>9870</td>
<td>555.6</td>
<td>15372</td>
<td>453.9</td>
<td>3248</td>
</tr>
</tbody>
</table>

* Excluding Personal Fragrance Products
Two Percent Fragrance Exemption Utilization Summary

<table>
<thead>
<tr>
<th>Regulated Category Group</th>
<th>Zero Fragrance Products</th>
<th>Fragranced Products Not Using 2%</th>
<th>Fragranced Products Using 2% Exemption</th>
<th>% Products Not Using Exemption</th>
<th>% Mass Not Using Exemption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Mass (tpd)</td>
<td>Count</td>
<td>Mass (tpd)</td>
<td>Count</td>
</tr>
<tr>
<td>Household</td>
<td>6391</td>
<td>347.7</td>
<td>19056</td>
<td>411.5</td>
<td>1161</td>
</tr>
<tr>
<td>Personal Care*</td>
<td>904</td>
<td>9.8</td>
<td>4287</td>
<td>44.9</td>
<td>432</td>
</tr>
<tr>
<td>Insecticide, Solvents, and Automotive</td>
<td>2575</td>
<td>198.1</td>
<td>710</td>
<td>22.1</td>
<td>103</td>
</tr>
<tr>
<td>Total</td>
<td>9870</td>
<td>555.6</td>
<td>24053</td>
<td>478.5</td>
<td>1696</td>
</tr>
</tbody>
</table>

* Excluding Personal Fragrance Products
Two Percent Fragrance Exemption Utilization by Category

Regulated Personal Care Products 2% Fragrance Exemption Utilization

- Percent Mass Using Exemption
- Fragranced Products Using 2% Exemption (tpd)
- % of Fragrance Exemption Utilized
Two Percent Fragrance Exemption Utilization by Category

Regulated Household Products 2% Fragrance Exemption Utilization

- Percent Mass Using Exemption
- Fragranced Products Using 2% Exemption (tpd)
- % of Fragrance Exemption Utilized
Two Percent Fragrance Exemption Sunset

- CARB staff considering how to address General Purpose Cleaners or General Purpose Degreasers
- CARB staff welcomes stakeholder data and/or feedback regarding other categories for which a fragrance exemption sunset would pose significant technical challenges
Discussion & Questions

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March 19, 2020 Public Work Group Meeting

- Test Method 310 and Related Consumer Product Regulation Updates
- Chlorinated Compound Prohibitions in Regulated Categories
- Addition of Select New Compounds to MIR Table
- Phase-Out of HFC-152a in Regulated Categories
- Options for Compressed Gas Propellant VOC Content Calculation
- Reflection of CaSNAP in Consumer Product Regulation
Next Steps:

- **Ongoing:** Meet with interested stakeholders
- **April 14, 2020 (tentative):** Next Public Workshop
- **Spring – Mid-Summer 2020:** Additional public meetings to further refine regulatory proposals
- **Late 2020:** Proposed regulatory amendments for Board consideration
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  - Phone: (916) 324-9549

  - Enter your email and check “Consumer Products Program”