

Methodologies for Determining Fee Emissions for Consumer Products Manufacturers For Fiscal Year 2022-2023

Below is an outline of the methods used to calculate the Fiscal Year (FY) 2022-2023 fees. Additional information on the fee program methods is available at this [website](#).

Data Sources and Growth Metrics

- FY 2022-2023 fees are determined using 2020 volatile organic compound (VOC) emissions.
- California Air Resources Board (CARB) staff determined per-company 2020 VOC emissions using information from the 2015 CARB Consumer and Commercial Products Survey (2015 CP Survey), 2014 CARB Consumer and Commercial Products Survey (2014 CP Survey), and the 2018 CARB Aerosol Coatings and Aerosol Adhesives Products Survey (2018 AC and AA Survey), except where a company chose to provide more recent product information.
- Consistent with CARB’s updated consumer product emission inventories, VOC emissions have been adjusted by California population growth, except for personal care product categories, for which Real Disposable Personal Income was used as a growth surrogate.
 - Non-personal care product categories adjustment:

VOC emissions have been adjusted by an estimated percent increase in population in California between the survey year and the fee base year 2020. The table below specifies percent increase values used in the adjustment. The California Department of Finance is the source for the population data.

Sales Data Year	CA Population Percent Increase Between Sales Year and 2020*
2015	1.61%
2018	0.17%

*The California Department of Finance is the source for the population data.

- Personal care product categories adjustment:

Evaluation of 2015 CP Survey sales and emissions data relative to previous CARB surveys led to the adoption of Real Disposable Personal Income (REMI v2.3) as the new growth surrogate for categories in the Personal care product sector.

The table below specifies percent increase value used to adjust 2015 CP Survey data. Details on the inventory update and personal care categories

adjustment method can be found in March 6, 2020 Consumer Products EICs 2020 Inventory Update document, available at this [website](#).

Sales Data Year	CA Real Disposable Personal Income Growth Surrogate Between Sales Year and 2020
2015	1.121174

*The California Department of Finance is the source for the population data.

- An emission fate adjustment (the down-the-drain) factor was applied to a number of surveyed product categories. The down-the-drain factors are applied to reduce the emissions because it is assumed the down the drain portion is not emitted into the air. A description of the method and a list of adjusted categories are available at: this [website](#).
- FY 2022-2023 fee emissions reflect an update to fragrance VOC speciation, as result of staff’s review and better understanding of fragrance formulations. CARB staff identified three fragrance speciation profiles for the update, with fragrance VOC content ranging from 100 percent VOC to 25 percent, depending on the product category. More information regarding CARB’s evaluation and updated assumptions regarding fragrance VOC content is provided in the March 6, 2020 Consumer Products EICs 2020 Inventory Update document, available at this [website](#).
- Aerosol Coatings emissions were determined by using sales and VOC ingredient information collected in the 2018 AC and AA Survey. A direct calculation of VOC emissions using sale and VOC ingredients information was performed, and emissions were adjusted by California population growth.
- The per-company emissions do not reflect survey market coverage adjustments. Adjustment factors are not applicable to individual companies.
- Low vapor pressure (LVP)-VOCs are not currently included in the per-company emissions for consumer products.

Adjustments for VOC Standards

- For FY 2022-2023 fee emissions, no adjustments have been made for VOC standards as no new standards went into effect for 2020. Regulation for Reducing VOC Emissions from Consumer Products (General Consumer Products Regulation) is available at this [website](#).