## Methodologies for Determining Fee Emissions for Consumer Products Manufacturers For Fiscal Year 2016-2017

Below is an outline of the methods used to calculate the Fiscal Year (FY) 2016-2017 fees. Additional information on the fee program methods is available at: <a href="http://www.arb.ca.gov/consprod/regact/feewg/feewg.htm">http://www.arb.ca.gov/consprod/regact/feewg/feewg.htm</a>.

## **Data Sources and Growth Metrics**

- FY 2016-2017 fees are determined using 2014 volatile organic compound (VOC) emissions.
- Air Resources Board (ARB) staff determined per-company 2014 VOC emissions using information from the 2013 ARB Consumer and Commercial Products Survey (2013 CP Survey) and the 2010 ARB Aerosol Coatings and Aerosol Adhesives Products Survey (2010 AC and AA Survey).
- VOC emissions have been adjusted by California population growth. VOC emissions based on the 2010 AC and AA Survey information have been adjusted by an approximate 3.95 percent increase in population in California between 2010 and 2014. VOC emissions based on the 2013 CP Survey information have been adjusted by an approximate 0.93 percent increase in population in California between 2013 and 2014. The California Department of Finance is the source for the population data.

Sales Data Year	CA Population Percent Increase Between Sales Year and 2014
2010	3.95%
2013	0.93%

<sup>\*</sup>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: http://www.arb.ca.gov/consprod/regact/2013surv/2013main.htm.
- Aerosol Coatings emissions were determined by using sales and VOC ingredient information collected in the 2010 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.
- Some information on low vapor pressure (LVP)-VOCs was obtained in the surveys.
   However, LVP-VOCs are not currently included in the per-company emissions for consumer products.

## **Adjustments for VOC Standards**

 For FY 2016-2017 fee emissions, adjustments have been made for standards that went into effect for 2014, where applicable. When products' VOC content is above these standards, they are adjusted to the VOC limit for their respective categories. The product categories and VOC limits are identified below:

Category	New VOC Standard (% by Weight)
Furniture Maintenance Product	
aerosol	12
Heavy-duty Hand Cleaner or Soap	
nonaerosol	1
Flying Bug Insecticide	
aerosol	20
Wasp or Hornet Insecticide	10
Anti-Seize Lubricant	
aerosol	40
nonaerosol	3
Cutting or Tapping Oil	
aerosol	25
nonaerosol	3
Gear, Chain, or Wire Lubricant	
aerosol	25
nonaerosol	3
Multi-purpose Lubricant (excluding solid or	
semisolid)	25
Penetrant	25
Rust Preventative or Rust Control Lubricant	
aerosol	25
nonaerosol	3
Multi-purpose Solvent	
nonaerosol	3
Paint Thinner	
nonaerosol	3

(Source: ARB, Regulation for Reducing VOC Emissions from Consumer Products; available at <a href="http://www.arb.ca.gov/consprod/regs/gencpregs.htm">http://www.arb.ca.gov/consprod/regs/gencpregs.htm</a>)

- The 2013 CP Survey product categories are available at the following link:
   <a href="http://www.arb.ca.gov/consprod/regact/2013surv/cprt/appendix%20a%20-%20list%20of%20survey%20categories.pdf">http://www.arb.ca.gov/consprod/regact/2010surv/2010surv.htm</a>, respectively.
- Adjustments for new VOC standards were only made in cases where 2013 data was used for fee emissions determinations.