

ALL NEW TEXT
**§ 2105.84 CONTROL OF VOC EMISSIONS FROM AUTOMOBILE AND
LIGHT-DUTY TRUCK ASSEMBLY COATINGS**

a. **Applicability.** Beginning January 1, 2014, this section applies to the owner or operator of an automobile and/or light-duty truck assembly coating operation, where the total actual VOC emissions from all automobile and/or light-duty truck assembly coating operations, including related cleaning activities, at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period, before controls.

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from an automobile and/or light-duty truck assembly coating operation, unless one of the following limitations is met:

1. The VOC content of each assembly coating process and applied material coating is equal to or less than the standard specified in Table 2105.84.

A. The VOC content, minus exempt compounds, of the applied coating, expressed in units of weight of VOC per volume of total nonexempt material, shall be calculated as follows:

$$\text{VOC} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

VOC = VOC content, minus exempt compounds, in lb (g) VOC / gal (l) of materials, minus exempt compounds

W_s = Weight of all volatile material in pounds (g), including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = Weight of water in pounds (g)

W_{es} = Weight of all non-precursor compounds in pounds (g)

V_m = Volume of total material, as applied in gallons (l)

V_w = Volume of water in gallons (l)

V_{es} = Volume of all non-precursor compounds in gallons (l)

2. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, or another add-on control which is acceptable under § 2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures specified in Part G, shall be no less than 85%.

c. **Records.** A facility, regardless of the facility's annual emission rate, which contains an automobile and/or light-duty truck assembly coating operation, shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:

1. The following parameters for each coating, thinner and other component as supplied:

A. The coating, thinner or component name and identification number;

B. The volume used;

- C. The mix ratio;
- D. The density or specific gravity;
- E. The weight percent of total volatiles, water, and exempt solvents;
- F. The volume percent of total solids, water, and exempt solvents for Table 2105.84 automobile and/or light-duty truck assembly coating operation.

The records shall be maintained for 2 years and shall be submitted to the Department on a schedule reasonably prescribed by the Department.

d. **Exempt Solvents.** The solvents methyl chloroform (1,1,1-trichloroethane) and methylene chloride are exempt from control under this Section. No automobile and/or light-duty truck assembly coating operation which seeks to comply with this Section through the use of an exempt solvent may be included in any alternative standard approved pursuant to this Article.

e. **Housekeeping.** The following work practices for cleaning materials apply to the owner or operator of an automobile and/or light-duty truck assembly coating operation:

1. Store all VOC-containing coatings, thinners, coating-related waste materials, cleaning materials and used shop towels in closed containers.
2. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing those materials.
3. Minimize spills of VOC-containing coatings, thinners, coating-related waste materials, and cleaning materials, cleaning up spills immediately.
4. Convey VOC-containing coatings, thinners, coating-related waste materials, and cleaning materials from one location to another in closed containers or pipes.
5. Minimize VOC emissions from cleaning of application, storage, mixing and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
6. Develop and implement a work practice plan to minimize VOC emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are specified in this regulation. The plan shall specify practices and procedures to ensure that VOC emissions from the following operations are minimized:
 - A. Vehicle body wiping;
 - B. Coating line purging;
 - C. Flushing of coating systems;
 - D. Cleaning of spray booth grates;

- E. Cleaning of spray booth walls;
- F. Cleaning of spray booth equipment;
- G. Cleaning of external spray booth areas; and
- H. Other housekeeping measures.

f. **Measurements.** Measurements of the volatile fraction of coatings, other than reactive coatings, used at automobile and/or light-duty truck assembly coating facilities shall be performed according to the applicable procedures established in § 2107.04 of this Article.

Table 2105.84

VOC Emission Limits for Automobile and/or Light-duty Truck Assembly Coatings
(pounds VOC per gallon or grams VOC per liter coating solids applied)

Assembly Coating Process VOC Emission Limit

lb/gal g/l

Electrodeposition primer operation when solids turnover ratio $(R_T) \geq 0.16$	0.7	84
(including application area, spray/rinse stations, and curing oven)		
Electrodeposition primer operation when $0.040 \leq (R_T) < 0.16$	$0.7 * 350^{0.160 - R_T}$	$84 * 350^{0.160 - R_T}$
(including application area, spray/rinse stations, and curing oven)		
Electrodeposition primer operation when $(R_T) < 0.040$	No VOC emission limit	
(including application area, spray/rinse stations, and curing oven)		
Primer-surfacer operations	12.0	1,440
(including application area, flash-off area, and oven)		
Topcoat operations	12.0	1,440
(including application area, flash-off area, and oven)		
Final repair operations	4.8	580
Combined primer-surfacer and topcoat operations	12.0	1,440

VOC Emission Limits for Miscellaneous Materials Used at Automobile and/or Light-duty Truck Assembly Coating Facilities

(pounds VOC per gallon or grams VOC per of liter coating excluding water and exempt compounds, as applied)

Material VOC Emission Limit

lb/gal g/l

Automobile and light-duty truck glass bonding primer	7.5	900
Automobile and light-duty truck adhesive	2.1	250
Automobile and light-duty truck cavity wax	5.4	650
Automobile and light-duty truck sealer	5.4	650
Automobile and light-duty truck deadener	5.4	650
Automobile and light-duty truck gasket/gasket sealing material	1.7	200
Automobile and light-duty truck underbody coating	5.4	650
Automobile and light-duty truck trunk interior coating	5.4	650
Automobile and light-duty truck bedliner	1.7	200
Automobile and light-duty truck weatherstrip adhesive	6.3	750
Automobile and light-duty truck lubricating wax/compound	5.8	700