



## **PUGET SOUND CLEAN AIR AGENCY**

**1904 3<sup>rd</sup> Avenue, Suite 105  
Seattle, Washington 98101-3317  
(206) 343-8800**

# **REGULATION II**

Copies of Regulations I, II, and III are available by writing, calling, or visiting the Agency. Our regulations are also available on the Agency's web site at <[www.pscleanair.org](http://www.pscleanair.org)>.

# **Regulation II of the PUGET SOUND CLEAN AIR AGENCY**

1904 3<sup>rd</sup> Avenue, Suite 105  
Seattle, Washington 98101-3317

## **Table of Contents**

Article	Page
1 Purpose, Policy, Short Title, and Definitions .....	1-1
2 Gasoline Marketing Emission Standards .....	2-1
3 Miscellaneous Volatile Organic Compound Emission Standards .....	3-1

Section	Page
1.01 Purpose .....	1-1
1.02 Policy .....	1-1
1.03 Short Title .....	1-1
1.04 General Definitions .....	1-2
1.05 Special Definitions .....	1-2
2.01 Definitions .....	2-1
2.03 Petroleum Refineries .....	2-1
2.05 Gasoline Loading Terminals .....	2-4
2.06 Bulk Gasoline Plants .....	2-4
2.07 Gasoline Dispensing Facilities .....	2-5
2.08 Gasoline Transport Tanks .....	2-12
2.09 Oxygenated Gasoline Carbon Monoxide Contingency Measure and Fee Schedule .....	2-13
2.10 Gasoline Station Ozone Contingency Measure .....	2-14
3.01 Cutback Asphalt Paving .....	3-1
3.02 Volatile Organic Compound Storage Tanks .....	3-1
3.03 Can and Paper Coating Operations .....	3-3
3.04 Motor Vehicle and Mobile Equipment Coating Operations .....	3-3
3.05 Graphic Arts Systems .....	3-4
3.08 Polyester, Vinylester, Gelcoat, and Resin Operations .....	3-5
3.09 Aerospace Component Coating Operations .....	3-6

## Regulation II of the PUGET SOUND CLEAN AIR AGENCY

As originally adopted by Resolution No. 462 on March 13, 1980 by the Board of Directors of the Agency and as amended by subsequent resolutions as follows:

Resolution		Sections Amended	
No.	Date Adopted		
482	12/11/80	Revised Deleted Re#d/ Revised Adopted	- Article 1 Title, 2.04, 2.05, 2.06, 2.08, 2.09, and 2.10 - 2.02, 2.13, and 2.14  - 1.03 to 1.04, 1.04 to 1.05, 2.12 to 2.13 - 1.03, 2.12, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 4.01, 4.02, 4.03, 4.04, and 4.05
510	02/11/82	Revised Deleted Adopted	- 1.05, 2.05, 2.07, 2.09, 2.13, 3.01, 3.03, 3.04, 3.09, and 3.10 - 2.10, 2.12, 3.06, 3.07, and 3.08 - 3.07
511	03/11/82	Revised	- 3.10
568	12/13/84	Revised Deleted Adopted	- 1.02, 2.13, and 4.02 - 3.10 - 3.11
670	08/09/90	Deleted	- 2.09 and 3.04 <i>[effective 10/01/90]</i>
700	06/13/91	Revised  Deleted Re#d/ Revised Adopted	- 1.02, 1.05, 2.03, 2.04, 2.05, 2.06, 2.07, 3.09, and 4.02 <i>[effective 07/15/91]</i> - 2.13, 3.02, 3.11, 4.01, and 4.03 <i>[effective 07/15/91]</i>  - 2.08 to 3.03, 2.11 to 3.01, 3.03 to 2.08 <i>[effective 07/15/91]</i> - 3.04, 3.08, and 3.11 <i>[effective 07/15/91]</i>
717	01/09/92	Revised	- 2.05 and 2.07 <i>[effective 02/09/92]</i>
764	10/14/93	Revised Adopted	- 2.07 <i>[effective 11/15/93]</i> - 2.09 <i>[effective 11/15/93]</i>
769	12/09/93	Revised Deleted	- 2.05, 3.04, 3.05, 3.08, 3.09, and 3.11 <i>[effective 01/13/94]</i> - 4.02, 4.04, and 4.05 <i>[effective 01/13/94]</i>
777	02/10/94	Revised	- 1.05, 2.07, 3.03 <i>[effective 03/17/94]</i>
787	05/12/94	Revised	- 2.09 <i>[effective 06/13/94]</i>
830	04/11/96	Revised	- 3.11 <i>[effective 05/16/96]</i>
834	07/11/96	Revised	- 2.09 <i>[effective 10/11/96]</i>

Resolution		Sections Amended	
No.	Date Adopted		
885	07/08/99	Revised Re#d/ Revised Adopted	- 1.05, 2.07, and 2.08 <i>[effective 08/13/99]</i> - 2.04 to 3.02 <i>[effective 08/13/99]</i> - 2.01 <i>[effective 08/13/99]</i>
895	09/09/99	Revised	- 1.01, 1.02, 1.03, and 1.05 <i>[effective 11/01/99]</i>
905	12/09/99	Revised	- 2.07 <i>[effective 01/10/00]</i>
914	03/09/00	Deleted	- 3.07 <i>[effective 04/13/00]</i>
976	12/19/02	Revised Adopted	- 2.09 <i>[effective 01/23/03]</i> - 2.10 <i>[effective 01/23/03]</i>
1002	07/24/03	Revised	- 1.05 and 3.04 <i>[effective 09/01/03]</i>
1023	03/25/04	Revised	- 2.07 <i>[effective 10/01/04]</i>
1039	02/24/05	Deleted	- 3.11 <i>[effective 04/01/05]</i>
1108	09/27/07	Revised	- 2.07 <i>[effective 11/01/07]</i>
1193	07/22/10	Revised	- 2.07 <i>[effective 09/01/11]</i>
1251	07/26/12	Revised	- 2.07 <i>[effective 09/01/12]</i>
1263	12/20/12	Revised	- 2.01 and 2.06 <i>[effective 02/01/13]</i>
1469	09/28/23	Revised	- 2.01 <i>[effective 11/01/23]</i>

# ARTICLE 1: PURPOSE, POLICY, SHORT TITLE, AND DEFINITIONS

---

## **SECTION 1.01 PURPOSE** Adopted 03/13/80 (462)\*

Revised 09/09/99 (895), 09/28/23 (1469)

The Puget Sound Clean Air Agency, consisting of the counties of King, Kitsap, Pierce, and Snohomish, having been activated by the Washington Clean Air Act, RCW 70A.15, adopted Regulation I on March 13, 1968 to control the emission of air contaminants from all sources, to provide for the uniform administration and enforcement of air pollution control in its jurisdiction and to carry out the requirements and purposes of the Washington Clean Air Act.

The Board of Directors of the Puget Sound Clean Air Agency has amended Regulation I from time to time as necessary and now recognizes the need for a special regulation to reduce ozone concentrations as required by the Federal Clean Air Act as amended. Accordingly, the Board has adopted Regulation II to provide for control of photochemically reactive volatile organic compounds (VOC), which are precursors to ozone, to meet the National Ambient Air Quality Standard for ozone.

## **SECTION 1.02 POLICY** Adopted 03/13/80 (462)

Revised 12/13/84 (568), 06/13/91 (700), 09/09/99 (895)

The Puget Sound Clean Air Agency hereby reaffirms its public policy as defined in Section 1.01 of Regulation I and further asserts its intent to secure and maintain control of emissions of volatile organic compounds to the extent needed to attain and maintain the National Ambient Air Quality Standard for ozone, and minimize the emission of stratospheric ozone depleting and toxic organic compounds, thus protecting the health and welfare of the people of the central Puget Sound region.

It is therefore the policy of the Board that water-based, high solids, or powder coatings and water-based cleaning materials are preferred to be used to comply with this regulation. The substitution of negligibly reactive VOCs for photochemically reactive VOCs shall not be an accepted method of compliance.

## **SECTION 1.03 SHORT TITLE** Adopted 12/11/80 (482)

Revised 09/09/99 (895)

This regulation may be known and cited as "Regulation II of the Puget Sound Clean Air Agency".

---

\*Numbers in parentheses are Resolution #s.

**SECTION 1.04 GENERAL DEFINITIONS** Adopted 03/13/80 (462)  
Revised/Renumbered 12/11/80 (482)

All definitions in Regulation I Section 1.07, Definitions, are fully applicable to Regulation II.

**SECTION 1.05 SPECIAL DEFINITIONS** Adopted 03/13/80 (462)  
Revised/Renumbered 12/11/80 (482), Revised 02/11/82 (510), 06/13/91 (700), 02/10/94 (777), 07/08/99 (885), 09/09/99 (895), 07/24/03 (1002)

When used in Regulation II of the Puget Sound Clean Air Agency:

- (a) **AEROSPACE COMPONENT** means the fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile or space vehicle.
- (b) **ANTIGLARE/SAFETY COATING** means a coating that does not reflect light.
- (c) **COMMERCIAL AEROSPACE PRIMER** means BMS 10-11, Type I.
- (d) **COMMERCIAL AEROSPACE TOPCOAT** means BMS 10-11, Type II.
- (e) **CUTBACK ASPHALT** means an asphalt that has been blended with more than 7% petroleum distillates by weight.
- (f) **FLEXOGRAPHIC PRINTING** means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.
- (g) **GELCOAT** means a polyester resin surface coating that provides a cosmetic enhancement and improves resistance to degradation from exposure to the environment.
- (h) **METALLIC/IRIDESCENT TOPCOAT** means any coating that contains more than 5 grams per liter (0.042 lb/gal) of metal or iridescent particles, as applied, where such particles are visible in the dried film.
- (i) **MILITARY AEROSPACE PRIMER** means the current version of MIL-P-85582.
- (j) **MILITARY AEROSPACE TOPCOAT** means the current version of MIL-C-85285.
- (k) **PACKAGING ROTOGRAVURE PRINTING** means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, that are, in subsequent operations, formed into packaging products and labels for articles to be sold.

- (l) **POLYESTER RESIN** means a group of synthetic resins containing ethylenic unsaturation and capable of undergoing free radical polymerization with styrene monomer.
- (m) **PRECOAT** means any coating that is applied to bare metal primarily to deactivate the metal surface for corrosion resistance to a subsequent water-based primer.
- (n) **PRETREATMENT WASH PRIMER** means any coating that contains a minimum of 0.5% acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- (o) **PRIMER** means a coating applied directly to a component for purposes of corrosion protection, protection from the environment, functional fluid resistance and adhesion of subsequent coatings.
- (p) **PRIMER SEALER** means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, color uniformity, and to promote the ability of an undercoat to resist penetration by the topcoat.
- (q) **PRIMER SURFACER** means any coating applied prior to the application of topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and that promotes a uniform surface by filling in surface imperfections.
- (r) **PUBLICATION ROTOGRAVURE PRINTING** means rotogravure printing upon paper that is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements and other types of printed materials.
- (s) **ROTOGRAVURE PRINTING** means the application of ink to a substrate by means of a roll printing technique that involves an intaglio or recessed image areas in the form of cells.
- (t) **TEMPORARY PROTECTIVE COATING** means a coating applied to an aerospace component to protect it from mechanical and environmental damage during manufacturing.
- (u) **TOPCOAT** means a coating applied over a primer or directly to a component primarily for purposes of appearance or identification.

## ARTICLE 2: GASOLINE MARKETING EMISSION STANDARDS

---

### SECTION 2.01 DEFINITIONS Adopted 07/08/99 (885)

Revised 12/20/12 (1263)

When used in this Article:

- (a) **GASOLINE** means any petroleum distillate or petroleum distillate/alcohol blend with a Reid vapor pressure of 4 pounds per square inch (27.6 kPa) or greater, which is used as a fuel for motor vehicles, marine vessels, or aircraft.
- (b) **GASOLINE STATION** means any site that dispenses gasoline from stationary storage tanks into fuel tanks of motor vehicles, marine vessels, or aircraft.
- (c) **PETROLEUM REFINERY** means a facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products by distilling crude oils or redistilling, cracking, extracting, or reforming unfinished petroleum derivatives. Not included are facilities re-refining used motor oils or waste chemicals, processing finished petroleum products, separating blended products, or air blowing asphalt.
- (d) **SUBMERGED FILL LINE** means any discharge pipe or nozzle that meets either of the following conditions:
  - (1) Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 6 inches (15 cm) from the bottom of the tank; or
  - (2) Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 18 inches (46 cm) from the bottom of the tank.
- (e) **TRANSPORT TANK** means a container with a capacity greater than 264 gallons (1000 liters) used for shipping gasoline over roadways.
- (f) **VAPOR RECOVERY SYSTEM** means a process that prevents the emission to the atmosphere of volatile organic compounds released by the operation of any transfer, storage, or process equipment.
- (g) **BULK GASOLINE PLANT** means a gasoline storage and transfer facility that receives more than 90% of its annual gasoline throughput by transport tank, and reloads gasoline into transport tanks.

### SECTION 2.03 PETROLEUM REFINERIES Adopted 03/13/80 (462)

Revised 06/13/91 (700)

- (a) Section 2.03 shall apply to all petroleum refineries.



- (b) It shall be unlawful for any person to cause or allow the operation of any vacuum-producing system unless all noncondensable VOC is piped to an appropriate firebox, flare, or incinerator for combustion or collected, compressed and added to the fuel gas system or contained and treated so as to prevent their emission to the atmosphere.
- (c) It shall be unlawful for any person to cause or allow the operation of a wastewater separator unless such separator meets the following requirements:
  - (1) Wastewater separator forebays shall incorporate a fixed solid cover with all openings sealed, totally enclosing the compartmented liquid contents.
  - (2) All other compartments of the separator shall be equipped with a floating pontoon or fixed solid cover equipped with closure seals that have no tears or leaks, installed and maintained so that gaps between the compartment wall and the seal shall not exceed 0.32 centimeters ( $\frac{1}{8}$  inch) for an accumulative length of 97% of the perimeter of the compartment. No gap between the compartment wall and the seal shall exceed 1.3 centimeters ( $\frac{1}{2}$  inch).
  - (3) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use. There shall be no visible gaps between the forebay cover and the compartment when the cover is closed.
- (d) It shall be unlawful for any person to cause or allow a process unit turnaround unless:
  - (1) The VOC contained in a process unit to be depressurized for turnaround is combusted by a flare or vented to an equally effective disposal system; and
  - (2) The pressure in a process unit following depressurization for turnaround is less than 5 pounds per square inch gauge (psig) before venting to the ambient air; and
  - (3) The owner or operator keeps a record of each process unit turnaround listing the date the unit was shut down and the pressure in the vessel when it was vented to the ambient air.
- (e) It shall be unlawful for any person to cause or allow the operation of a component handling volatile organic compounds with a true vapor pressure greater than 10.5 kPa (1.5 psia) at 20°C unless such person:
  - (1) Develops and conducts a monitoring program as follows:
    - (A) Monitor all pump seals, pipeline valves in liquid service and process drains yearly;
    - (B) Monitor all compressor seals, pipeline valves in gaseous service and pressure relief valves in gaseous service quarterly;

- (C) Visually monitor all pump seals weekly;
  - (D) Monitor any dripping pump seal immediately;
  - (E) Monitor any relief valve within 24 hours after it has vented to the atmosphere; and
  - (F) Monitor immediately after repair any component that was found leaking.
- (2) Maintains a leaking component monitoring log that shall contain, at a minimum, the following:
- (A) The name of the process unit where the component is located;
  - (B) The type of component;
  - (C) The tag number of the component;
  - (D) The date on which a leaking component is discovered;
  - (E) The date on which a leaking component is repaired;
  - (F) The date and instrument reading of the recheck procedure after a leaking component is repaired;
  - (G) A record of the calibration of the monitoring instrument;
  - (H) A record of those leaks that cannot be repaired until turnaround;
  - (I) The total number of components checked and the total number of components found leaking.

Copies of the monitoring log shall be retained for a minimum of 2 years after the date on which the record was made or the report prepared.

- (3) Records all leaking components that have a VOC concentration greater than 10,000 ppm and places a weatherproof tag bearing an identification number and the date the leak was located on each leaking component.
  - (4) Corrects and retests the leaking component, as soon as practicable, but not later than 15 days after the leak is recorded. If a leak continues after all reasonable corrective actions have been taken, then the component shall be repaired or replaced on the next scheduled turnaround.
  - (5) Identifies all leaking components that cannot be corrected until the refinery unit is shut down for turnaround.
- (f) It shall be unlawful to install or operate a valve at the end of a pipe or line containing VOC unless the pipe or line is sealed with a second suitable closure. Exceptions to this requirement are the ends of a pipe or line connected to pressure relief valves, aspirator vents or other devices specifically required to be open for safety protection. The sealing device shall be removed only when a sample is being taken or during maintenance operations.
- (g) Pressure relief devices that are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves and valves that are

not externally regulated are exempt from the monitoring requirements of Section 2.03.

## **SECTION 2.05 GASOLINE LOADING TERMINALS** Adopted 03/13/80 (462)

Revised 12/11/80 (482), 02/11/82 (510), 06/13/91 (700), 01/09/92 (717), 12/09/93 (769)

- (a) Section 2.05 shall apply to all gasoline loading terminals with an annual gasoline throughput greater than 7,200,000 gallons.
- (b) It shall be unlawful for any person to cause or allow the loading of gasoline into any transport tank unless all the following conditions are met:
  - (1) The loading terminal shall employ bottom loading and be equipped with a vapor recovery system;
  - (2) All loading lines and vapor lines shall be equipped with vapor-tight fittings that close automatically upon disconnect;
  - (3) All vapor return lines shall be connected between the transport tank and the vapor recovery system such that all displaced volatile organic compounds are vented to the vapor recovery system; and
  - (4) The back-pressure in the vapor lines shall not exceed 4.5 kPa (18 inches) of water pressure.
- (c) The vapor recovery system required by this section shall prevent the emission of at least 90% by weight of the volatile organic compounds and shall limit the emission of volatile organic compounds to no more than 35 milligrams per liter (mg/l) of gasoline transferred.
- (d) The vapor recovery system required by Section 2.05(b) shall be equipped with a continuous emission monitoring system meeting the requirements of Article 12 of Regulation I.

## **SECTION 2.06 BULK GASOLINE PLANTS** Adopted 03/13/80 (462)

Revised 12/11/80 (482), 06/13/91 (700), Revised 12/20/12 (1263)

- (a) It shall be unlawful for any person to cause or allow the transfer of 20,000 gallons or more of gasoline at a gasoline bulk plant on any day.
- (b) The following provisions in Sections 2.06(c) and 2.06(d) of this regulation shall apply to all bulk gasoline plants with an annual average daily gasoline throughput greater than 15,140 liters (4,000 gallons).
- (c) It shall be unlawful for any person to cause or allow the transfer of gasoline from any transport tank into any stationary storage tank with a capacity greater than 3,785 liters (1,000 gallons) unless the following conditions are met:
  - (1) Such stationary storage tank is equipped with a permanent submerged fill pipe and "CARB-certified" vapor recovery system; and

- (2) Such transport tank is equipped to balance vapors and is maintained in a leak-tight condition in accordance with Section 2.08 of Regulation II; and
  - (3) All vapor return lines are connected between the transport tank and the stationary storage tank, and the vapor recovery system is operating.
- (d) It shall be unlawful for any person to cause or allow transfer of gasoline between a stationary storage tank and a transport tank except under the following conditions:
- (1) All transport tanks shall be bottom loaded;
  - (2) The loading of all transport tanks, shall be performed such that 90% by volume of the gasoline vapors displaced during filling are prevented from being released into the ambient air;
  - (3) Such transport tanks shall be equipped to balance vapors; and
  - (4) All vapor return lines are connected between the transport tank and the stationary storage tank, and the vapor recovery system is operating.

## **SECTION 2.07 GASOLINE DISPENSING FACILITIES**

Adopted 03/13/80 (462), Revised 02/11/82 (510), 06/13/91 (700), 01/09/92 (717), 10/14/93 (764), 02/10/94 (777), 07/08/99 (885), 12/09/99 (905), 03/25/04 (1023), 09/27/07 (1108), 07/22/10 (1193), 07/26/12 (1251)

### **(a) Applicability**

- (1) The requirements of Section 2.07 of this regulation apply to any facility that dispenses gasoline from a stationary storage tank with a rated capacity of more than 1,000 gallons. The provisions of this rule do not apply to any Stage 1 or Stage 2 vapor recovery system that is not required by this rule. This rule does not require the installation of any In Station Diagnostics (ISD) system.
- (2) This rule shall have an effective date of September 1, 2011.

### **(b) Definitions**

- (1) **CARB-CERTIFIED** means a Stage 1 or Stage 2 vapor recovery system, equipment, or any component thereof, for which the California Air Resources Board (CARB) has evaluated its performance and issued an Executive Order. Each equipment component listed on the applicable certified-CARB Executive Order must be installed. Equipment component(s) not listed in a CARB Executive Order may not be installed as replacement for a certified part.
- (2) **INSTALL or INSTALLING** means establishing or placing in service CARB-certified Stage 1 or Stage 2 vapor recovery equipment at a facility within the Agency's jurisdiction, and includes repairs completed as part of compliance testing. Equipment repairs performed by an owner or operator to correct defects discovered through self-inspection are not included in this definition.
- (3) **ORVR** means the Onboard Refueling Vapor Recovery system contained within a vehicle that captures the gasoline vapors that are displaced when gasoline is dispensed to the vehicle tank.

- (4) **OWNER or OPERATOR** means a person who owns, leases, supervises, or operates a facility subject to this regulation.
- (5) **STAGE 1 MODIFICATION** means any of the following equipment changes or projects, including but not limited to:
  - (A) Installation or replacement of a stationary storage tank rated more than 1,000 gallons that stores gasoline;
  - (B) Replacement of Stage 1 components that are upgrades, including but not limited to replacement of all spill buckets, all drop tubes, or all adaptors.
- (6) **STAGE 2 MODIFICATION** means any of the following equipment changes or projects, including but not limited to:
  - (A) Addition of new fueling position(s);
  - (B) Replacement of all existing dispensers;
  - (C) Converting vapor-balance system to vacuum-assist system or converting vacuum-assist system to vapor-balance system;
  - (D) Replacement of Stage 2 vapor recovery components that are upgrades, including but not limited to dispensing configuration changes to include six-pack to blending dispenser conversions, and replacement of pre-ORVR dispensers to ORVR-compatible or Enhanced Vapor Recovery (EVR) technology.
- (7) **SYSTEM** means the complete and integrated components necessary to provide the vapor recovery emission control service for a gasoline dispensing facility required in Section 2.07 of this regulation. A system may be the Stage 1 vapor recovery equipment, the Stage 2 vapor recovery equipment, and/or the combined integration of appropriate Stage 1 and Stage 2 vapor recovery equipment at a gasoline dispensing facility.
- (8) **TEST or TESTING** means the performance of a test or method or series of tests or methods to determine the integrity, functionality or effectiveness of CARB-certified Stage 1 or Stage 2 vapor recovery equipment at a facility within the Agency's jurisdiction.

(c) Installation Requirements

- (1) Installation Requirements – Stage 1
  - (A) All gasoline dispensing facilities with a current annual gasoline throughput greater than 200,000 gallons or with a gasoline storage tank installed after January 1, 1979 shall be equipped with a CARB-certified Stage 1 vapor recovery system.
  - (B) After April 1, 2001, all gasoline dispensing facilities that install or replace a gasoline tank or a Stage 1 vapor recovery system shall be equipped with a CARB-certified EVR system. This requirement includes installations defined as a Stage 1 modification in Section 2.07 of this regulation.

- (C) Any person installing a CARB-certified Stage 1 vapor recovery system must install the system in accordance with the applicable CARB Executive Order in effect on the date of installation.
  - (D) Any person installing CARB-certified Stage 1 vapor recovery equipment shall be certified as required in Section 2.07(f) of this regulation.
  - (E) All gasoline dispensing facilities with dual-point Stage 1 vapor recovery systems shall be equipped with Stage 1 swivel adapters if the facility is required to be equipped with a Stage 2 vapor recovery system under Section 2.07(c)(2) of this regulation.
- (2) Installation Requirements – Stage 2
- (A) All gasoline dispensing facilities with a current annual gasoline throughput greater than 600,000 gallons (or 840,000 gallons for Kitsap County only) shall be equipped with a CARB-certified Stage 2 vapor recovery system.
  - (B) All gasoline dispensing facilities with both a current annual gasoline throughput greater than 200,000 gallons and a gasoline storage tank installed after August 2, 1991 shall be equipped with a CARB-certified Stage 2 vapor recovery system.
  - (C) All gasoline dispensing facilities with Stage 2 vapor recovery systems installed after April 1, 2003 shall employ either CARB-certified ORVR-compatible systems or CARB-certified EVR systems. This requirement includes installations defined as a Stage 2 modification.
  - (D) Any person installing a CARB-certified Stage 2 vapor recovery system must install the system in accordance with the applicable CARB Executive Order in effect on the date of installation.
  - (E) Any person installing CARB-certified Stage 2 vapor recovery equipment shall be certified as required in Section 2.07(f) of this regulation.
- (d) Maintenance Requirements
- (1) Maintenance Requirements – All Stage 1 vapor recovery systems shall be operated and maintained in accordance with the applicable CARB Executive Order in effect on the date of installation.
  - (2) Maintenance Requirements – Stage 2
    - (A) All Stage 2 vapor recovery systems installed after April 1, 2003 must be ORVR-compatible and must be operated and maintained in accordance with the applicable CARB Executive Order in effect on the date of installation. However, ISD system installation is not required.

- (B) All Stage 2 vapor recovery systems installed prior to April 1, 2003 shall be operated and maintained in accordance with the applicable CARB Executive Order in effect as of April 1, 2003, even if CARB later decertifies the system. For Stage 2 vapor recovery systems installed prior to April 1, 2003, the installation of equipment determined by the manufacturer to be interchangeable with the original approved equipment is allowed.
- (C) Defects listed in Table 1 are evidence that the installed equipment is not operated or maintained in accordance with Section 2.07 of this regulation. The defects listed in Table 1 shall be included in the operation and maintenance plan required for the facility.

Table 1  
Stage 2 Defects

Equipment	Inspection Procedures	Defects
Nozzle	Visually inspect for leaking gasoline.	Visible gasoline leaks.
Hose (from dispenser to nozzle) including whip hose	Visually inspect the hose for leaking gasoline.	Visible gasoline leaks.

(e) Testing requirements

(1) Stage 1 Initial Installation Testing Requirements

- (A) Owners or operators must obtain the Stage 1 compliance tests identified in Table 2, and each test must be conducted in accordance with the test procedures identified in Table 2. The compliance tests shall be completed after initial installation of any Stage 1 system and prior to dispensing fuel commercially.
- (B) Stage 1 compliance tests shall be performed by person(s) who are certified as required in Section 2.07(f) of this regulation.
- (C) The tests listed in Table 2 are exempt from the requirements of Section 3.07 of Regulation I.

Table 2  
Initial Installation Stage 1 Compliance Tests

Stage 1 EVR Vapor Recovery Systems	CARB Tests Required	CARB Test Procedures <sup>1</sup>	Date of Adoption
	Leak Rate Test <sup>2</sup> .....	TP-201.1C or TP-201.1D....	October 8, 2003
	Static Pressure Decay <sup>3</sup> .....	TP-201.3.....	March 17, 1999
	Static Torque of Adaptors .....	TP-201.1B .....	October 8, 2003
	Leak Rate/Cracking P/V <sup>4</sup> .....	TP-201.1E .....	October 8, 2003

<sup>1</sup>Or test procedures that have been approved by CARB as equivalent to CARB procedures.

<sup>2</sup>TP-201.1C has no overfill prevention device and TP-201.1D is required for drop tubes with overfill prevention.

<sup>3</sup>Except that test procedure TP-201.3B (dated 4/12/96) shall be used for above-ground storage tanks.

<sup>4</sup>The test procedures are also listed in Exhibit 2 of the CARB Executive Order.

## (2) Stage 2 Testing Requirements

- (A) Owners or operators must obtain the Stage 2 compliance tests identified in Table 3 annually, and each test must be conducted in accordance with the test procedures identified in Table 3. In addition, each test shall be completed no less than 335 days and no more than 395 days since the last annual test.
- (B) For stations with vapor-balance systems, the first annual test completed after September 1, 2011 shall be completed on an annual schedule as specified above or by January 15, 2012, whichever date comes first.
- (C) Owners or operators must obtain a Static Pressure Decay Test semiannually. One test shall be completed during the annual testing required in Section 2.07(e)(2)(A) of this regulation and the other semiannual test shall be completed no less than 150 days and no more than 210 days since the last Static Pressure Decay Test.
- (D) Owners or operators must obtain the Stage 2 compliance tests identified in Table 3 after initial installation of any Stage 2 system and prior to dispensing fuel commercially.
- (E) Stage 2 compliance tests shall be performed by persons who are certified as required in Section 2.07(f) of this regulation.
- (F) The tests listed in Table 3 are exempt from the requirements of Section 3.07 of Regulation I.

Table 3  
Annual Stage 2 Compliance Tests

Stage 2 Vapor Recovery Systems	CARB Tests Required	CARB Test Procedures <sup>1</sup>	Date of Adoption
All Vapor-Balance	Static Pressure Decay <sup>2</sup> .....	TP-201.3 .....	March 17, 1999
	Dynamic Back Pressure .....	TP-201.4 .....	July 3, 2002
	Tank-Tie Test <sup>3</sup> .....	TP-201.3C .....	March 17, 1999
	Static Torque of Adaptors <sup>4</sup> .....	TP-201.1B .....	October 8, 2003
All Vacuum-Assist <sup>5</sup>	Static Pressure Decay <sup>2</sup> .....	TP-201.3 .....	March 17, 1999
	Dynamic Back Pressure .....	TP-201.4 .....	July 3, 2002
	Air-to-Liquid Ratio .....	TP-201.5 .....	February 1, 2001
	Tank-Tie Test <sup>3</sup> .....	TP-201.3C .....	March 17, 1999
	Static Torque of Adaptors <sup>4</sup> .....	TP-201.1B .....	October 8, 2003



<sup>1</sup>Or test procedures that have been approved by CARB as equivalent to CARB procedures.

<sup>2</sup>For static pressure decay test, test procedure TP-201.3B (dated 4/12/96) shall be used for above-ground storage tanks.

<sup>3</sup>Tank-tie test must be conducted at least once, or after any tank configuration changes to show the tanks are manifolded. The tank-tie test records must be kept on-site to verify compliance.

<sup>4</sup>For static torque of adaptors, testing is required only for stations equipped with dual-point Stage 1 vapor recovery systems.

<sup>5</sup>Vapor return line vacuum integrity tests shall be conducted on each vacuum-assist system equipped with a central vacuum pump annually, in accordance with Exhibit 4 of CARB Executive Orders G-70-165 and G-70-186, as applicable.

### (3) Failed Compliance Tests

Owners or operators must notify the Agency in writing within 24 hours of any failed compliance tests, if the defective equipment cannot be repaired or replaced by the person conducting the test on the day of the test. If the defective equipment cannot be repaired by the close of the next business day following the failed compliance test, the owner or operator must stop receiving and/or dispensing gasoline from the defective equipment until it is repaired and retested, and passes all required compliance tests. The requirements in Section 2.07(e)(3) of this regulation do not include any operation of equipment necessary to conduct a retest. Equipment operation after a failed compliance test is evidence of a continuing violation until a passing test has been completed for that equipment.

### (4) Test Reports

(A) After the testing required by Section 2.07 of this regulation has been conducted, the owner or operator must obtain a written test report.

(B) The written report must include the following information:

- name and address of the person(s) who conducted each test,
- date of the testing,
- equipment tested,
- test procedures or methods used,
- results of the tests, and
- any repairs made or corrective actions taken necessary to pass the tests.

- (C) Owners or operators must keep a copy of the test report on-site at the facility and available for inspection for at least 2 years after the date the report was prepared.

(5) Compliance Testing Activity Reports

- (A) Persons completing the Stage 1 or Stage 2 testing identified in Section 2.07 of this regulation shall submit compliance testing activity reports to the Agency. Compliance testing activity reports must be submitted on approved forms through the Agency website and must be received by the Agency no later than 5 days after completion of the compliance test on-site.
- (B) Compliance testing activity reports shall include, but not be limited to, the following information:
- identification of the facility,
  - date of the testing,
  - identification of each test conducted,
  - results (pass/fail) of each test conducted,
  - name of the person(s) who conducted each test and current certification credential information for each such person, and
  - statement of whether repairs were completed, and if so, description of all repairs undertaken and/or completed.

(f) Certification for Persons Testing or Installing

- (1) Persons testing or installing CARB-certified Stage 1 or Stage 2 vapor recovery equipment as required by Section 2.07 of this regulation must be certified by the International Code Council or other association that the Agency has determined provides an examination where persons can demonstrate their knowledge of regulatory codes, standards, and practices pertaining to CARB-certified Stage 1 or Stage 2 vapor recovery equipment, or have passed another qualifying examination approved by the Agency.
- (2) Persons testing or installing CARB-certified Stage 1 or Stage 2 vapor recovery equipment must be certified every other year. Such persons must possess a valid certification at the time of performing any testing or installation of CARB-certified Stage 1 or Stage 2 vapor recovery equipment required by Section 2.07 of this regulation. Subsequent certifications must occur within 2 years of the anniversary date of a person's first certification under Section 2.07(f) of this regulation.
- (3) All testing must be conducted consistent with the requirements of Section 2.07(e) of this regulation.

- (4) The certification requirements in Section 2.07(f) of this regulation do not apply to owners or operators of gasoline dispensing facilities.

(g) Recordkeeping Requirements for Owners or Operators

Owners or operators must keep a copy of all records required by this rule on-site at the facility and available for inspection for at least 2 years after the date the record was prepared.

**SECTION 2.08 GASOLINE TRANSPORT TANKS** Adopted 12/11/80 (482)

Revised 02/11/82 (510), Revised/Renumbered 06/13/91 (700), Revised 07/08/99 (885)

- (a) This section shall apply to all transport tanks that deliver gasoline to gasoline stations or bulk gasoline distribution facilities equipped with a vapor recovery system.
- (b) It shall be unlawful for the owner or operator of a transport tank to cause or allow the transfer of gasoline at a facility equipped with a vapor recovery system unless:
- (1) The transport tank is also equipped with a vapor recovery system;
  - (2) The transport tank is tested annually in accordance with the procedures in Method 27 of 40 CFR Part 60, Appendix A by pressurizing the tank to gauge pressures of 18 and –6 inches of water and waiting for a time period of 5 minutes during which the pressure change is no more than:

tank capacity (gallons)	pressure change (inches of water)
2,500 or more	1.0
1,500-2,499	1.5
1,000-1,499	2.0
999 or less	2.5

- (3) The internal vapor valve of the transport tank is tested annually in accordance with the procedures in Method 27 of 40 CFR Part 60, Appendix A by repressurizing the tank to 18 inches of water, closing the vapor valve, relieving all the pressure in the vapor return line, resealing the vapor return line, and waiting for a time period of 5 minutes during which the pressure change in the vapor return line and manifold is no more than 5 inches of water;
- (4) The transport tank carries a certificate that includes the following information:
  - (A) Testing company name, date, and test location;
  - (B) Tester's name, title, and signature;
  - (C) Transport tank owner's name and address;
  - (D) Transport tank identification number;

- (E) Type of test: pressure decay, vacuum decay, or internal vapor valve;
  - (F) Vapor tightness repair (if any): nature of repair work and when performed in relation to the test; and
  - (G) Test results: pressure or vacuum change, time period of test.
- (5) The transport tank displays a sticker near the Department of Transportation certification plate, which shows the identification number of the transport tank and the date the transport tank last passed the tests specified in this section; and
  - (6) The vapor recovery system is employed and the concentration of gasoline vapors is below the lower explosive limit (measured as propane) at all points a distance of 1 inch or greater from any potential leak source on the transport tank. (Any transport tank that fails to meet this requirement shall be repaired and retested for compliance with Sections 2.08(b)(2) and (b)(3) of this regulation within 10 days, and a copy of the revised compliance certificate shall be sent to the Agency within 5 days after completing the required leak test.)
- (c) Transport tanks tested prior to August 1, 1999 shall be subject to the requirements in Sections 2.08(b)(2) and (b)(3) of this regulation at the time of their next annual test.

## **SECTION 2.09 OXYGENATED GASOLINE CARBON MONOXIDE CONTINGENCY MEASURE AND FEE SCHEDULE**

Revised 05/12/94 (787), 07/11/96 (834), 12/19/02 (976)

Adopted 10/14/93 (764)

- (a) Applicability. This section shall apply to gasoline intended as a final product for fueling of motor vehicles within King, Pierce, and Snohomish Counties during the months of November, December, January, and February if, in consultation with the Washington Department of Ecology and the Agency, the U.S. Environmental Protection Agency makes a written finding that:
  - (1) Quality-assured violations of the national ambient air quality standard for carbon monoxide have occurred at multiple monitoring sites within the jurisdiction of the Agency,
  - (2) Local mitigation measures have not improved traffic conditions sufficiently to help prevent future violations, and
  - (3) Prevention of future violations can be reasonably addressed through the implementation of this section.

The Agency shall provide public notice of this written finding no later than May 1 to all registered gasoline stations and blenders. This section shall take effect on November 1 following the public notice of such a written finding.

- (b) It shall be unlawful for any person to sell, make available for sale, or dispense gasoline with an oxygen content less than 2.7% by weight.

- (c) It shall be unlawful for any gasoline station to dispense oxygenated gasoline unless the fuel dispensing system is conspicuously labeled as follows: The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles.
- (d) Blenders of oxygenated gasoline shall register with the Agency on an annual basis. Each request for registration shall be on forms supplied by the Agency and shall be accompanied by a fee to compensate for the cost of administering the program. The following fee table, based upon the average monthly sales of gasoline sold during the previous November, December, January, and February, shall apply:

Volume (gallons)	
less than 100,000	\$ 500.00
100,000 or more, but less than 1,000,000	\$ 1,000.00
1,000,000 or more, but less than 15,000,000	\$10,000.00
15,000,000 or more	\$25,000.00

- (e) Upon assessment by the Agency, this registration fee is due and payable within 30 days. It shall be deemed delinquent if not fully paid within 90 days.
- (f) Blenders of oxygenated gasoline shall, upon request by the Agency, submit periodic reports summarizing how the requirements of this section were met. Each report shall be submitted on forms supplied by the Agency within 30 days of receipt of forms.

## **SECTION 2.10 GASOLINE STATION OZONE CONTINGENCY**

**MEASURE** Adopted 12/19/02 (976)

- (a) Applicability. This section shall apply to gasoline stations that use coaxial Stage 1 vapor recovery systems and dispense 600,000 gallons or more of gasoline per year if, in consultation with the Washington State Department of Ecology and the Agency, the U.S. Environmental Protection Agency makes a written finding that:
  - (1) A quality-assured violation of the national ambient air quality standard for ozone has occurred, and
  - (2) Prevention of future violations can be reasonably addressed through the implementation of this section.

The Agency shall provide public notice of this written finding no later than November 1. This section shall take effect on May 1 following the public notice of such a written finding.

- (b) It shall be unlawful for any person to cause or allow the transfer of gasoline from a transport tank into a stationary storage tank unless a California Air Resources Board (CARB) Stage I system, approved after July 1, 2002, is

installed and operated in accordance with CARB system certification requirements.

- (c) The systems required in Section 2.10(b) of this regulation shall be installed within 1 year of the May 1 effective date listed in Section 2.10(a) of this regulation.

# **ARTICLE 3: MISCELLANEOUS VOLATILE ORGANIC COMPOUND EMISSION STANDARDS**

---

## **SECTION 3.01 CUTBACK ASPHALT PAVING** Adopted 03/13/80 (462)

Revised/Renumbered 06/13/91 (700)

- (a) It shall be unlawful for any person to cause or allow the use of cutback asphalt in paving during the months of June, July, August, and September, except as provided for in Section 3.01(b).
- (b) The following paving uses and applications of cutback asphalts are permitted during all months of the year:
  - (1) As a penetrating prime coat on aggregate bases prior to paving.
  - (2) The manufacture of patching mixes used exclusively for pavement maintenance and needed to be stockpiled for times longer than one month.
  - (3) All paving uses when the temperature during application is below 10°C (50°F).

## **SECTION 3.02 VOLATILE ORGANIC COMPOUND STORAGE TANKS**

Adopted 03/13/80 (462)

Revised 12/11/80 (482), 06/13/91 (700), Revised/Renumbered 07/08/99 (885)

- (a) This section shall apply to all stationary storage tanks with a capacity of 40,000 gallons (151,400 liters) or greater storing volatile organic compounds with a true vapor pressure of 1.5 pounds per square inch (10.5 kPa) or greater at actual monthly average storage temperatures.
- (b) It shall be unlawful for any person to cause or allow such storage unless the storage tank is a pressure tank maintaining working pressures sufficient at all times to prevent organic vapor loss to the atmosphere, or is designed and equipped with one of the following vapor loss control devices:
  - (1) An external floating roof, consisting of a pontoon-type or double deck-type cover that rests on the surface of the liquid contents at all times and is equipped with a closure device between the tank shell and the roof edge. The closure device shall consist of two seals, a primary seal and a rim mounted secondary seal above the primary; or
  - (2) A fixed roof with an internal floating-type cover that rests on the surface of the liquid contents at all times and is equipped with a closure device. The closure device shall prevent the emission of organic vapors such that the concentration of such vapors in the vapor space above the internal floating roof does not exceed 50% of the lower explosive limit (LEL) measured as propane; or
  - (3) A fixed roof tank with control equipment that reduces emissions by 95% or greater.

- (c) All primary seals or closure devices shall meet the following requirements:
  - (1) The primary seal shall contain no visible holes, tears, or other openings.
  - (2) No gap between the tank shell and the primary seal shall exceed 1½ inches (3.8 cm). No continuous gap greater than ⅛ inch (0.32 cm) shall exceed 10% of the circumference of the tank. The cumulative length of all primary seal gaps exceeding ½ inch (1.3 cm) shall not be more than 10% of the circumference; and the cumulative length of all primary seal gaps exceeding ⅛ inch (0.32 cm) shall not be more than 40% of the circumference.
- (d) All secondary seals or closure devices shall meet the following requirements:
  - (1) There shall be no visible holes, tears, or other openings in the secondary seal or seal fabric;
  - (2) The secondary seal shall be intact and uniformly in place around the circumference of the floating roof between the roof and the tank wall; and
  - (3) No gap between the tank shell and the secondary seal shall exceed ½ inch (1.3 cm). The cumulative length of all gaps exceeding ⅛ inch (0.32 cm) in width between the secondary seal and the tank wall shall not exceed 5% of the circumference of the tank.
- (e) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves shall be:
  - (1) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
  - (2) Equipped with projections into the tank that remain below the liquid surface at all times.
- (f) Automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports.
- (g) Rim vents shall be set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting.
- (h) Emergency roof drains shall be provided with slotted membrane fabric covers or equivalent that cover at least 90% of the area of the opening.
- (i) Routine inspections shall be performed by the owner or operator as follows:
  - (1) For external floating roof tanks, conduct a semiannual visual inspection of all seals and closure devices and measure the primary and secondary seal gap annually;
  - (2) For internal floating roof tanks, visually inspect all seals and measure the concentration of VOC in the vapor space above the internal floating roof semiannually; and



- (3) Maintain records of the results of any inspections performed for a period of 2 years after the date on which the record was made.

### SECTION 3.03 CAN AND PAPER COATING OPERATIONS

Adopted 03/13/80 (462)

Revised 12/11/80 (482), Revised/Renumbered 06/13/91 (700), Revised 02/10/94 (777)

It shall be unlawful for any person to cause or allow the application of any coating from the following processes that has a VOC content in excess of the following limits:

Process	VOC Content (excluding water)	
	Grams/Liter	(Lbs/Gal)
Can Coating		
Basecoat (exterior and interior) and overvarnish	340	(2.8)
Interior body spray, exterior end, spray or roll coat	510	(4.2)
End sealing compound	440	(3.7)
Paper Coating	350	(2.9)

### SECTION 3.04 MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS

Adopted 06/13/91 (700)

Revised 12/09/93 (769), 07/24/03 (1002)

- (a) It shall be unlawful for original equipment manufacturers (OEMs) to apply any coating with a VOC content in excess of the following limits to motorized vehicles, their parts and components, or equipment designed to be pulled by motorized vehicles:

Type of Coating	VOC Content (excluding water)	
	Grams/Liter	(Lbs/Gal)
Pretreatment Wash Primer	780	(6.5)
Precoat	780	(6.5)
Primer/Primer Surfacer	720	(6.0)
Primer Sealer	720	(6.0)
Topcoat	720	(6.0)
Metallic/Iridescent Topcoat	720	(6.0)

- (b) It shall be unlawful for any person to apply any specialty coating with a VOC content in excess of 840 grams/liter (7.0 lbs/gal), excluding water. Use of all specialty coatings except antiglare/safety coatings shall not exceed 5.0% of all coatings applied on a monthly basis. Specialty coatings are coatings that

are necessary due to unusual job performance requirements and whose VOC content exceeds 630 grams/liter.

- (c) The VOC content of each coating regulated by this section shall be available to Agency personnel upon request. Monthly records shall be maintained to demonstrate compliance with the standards specified in Section 3.04(a) and 3.04(b) of this regulation. The records shall include type of paint, quantity applied, and how the coating qualifies as specialty. The records shall be made available to Agency personnel upon request.
- (d) It shall be unlawful for any person to apply any VOC-containing material to any motorized vehicles, their parts and components, or equipment designed to be pulled by motorized vehicles unless the coating is applied by the use of one of the following methods:
  - (1) High volume, low pressure (0.1 to 10 psig air pressure for atomization) spray equipment,
  - (2) Electrostatic spray equipment,
  - (3) Flow coat,
  - (4) Dip coat,
  - (5) Brush coat,
  - (6) Hand-held aerosol cans,
  - (7) Roll coat, or
  - (8) Air brush.
- (e) It shall be unlawful for any person to use any VOC-containing material for the cleanup of spray equipment, including paint lines, unless equipment for collecting the VOC-containing material and minimizing the evaporation to the atmosphere is employed. All VOC-containing materials that are flushed through the spray equipment or lines during cleanup shall be collected in a closed container.
- (f) It shall be unlawful for any person to use open containers for the storage or disposal of VOC-containing materials. Such containers and tanks shall be kept closed except when being cleaned or when materials are being added, mixed, or removed. Closed containers for solvent rag or paper disposal are required. Empty containers as defined in WAC 173-303-160 are exempt.

**SECTION 3.05 GRAPHIC ARTS SYSTEMS** Adopted 12/11/80 (482)  
Revised 12/09/93 (769)

- (a) This section shall apply to all rotogravure and flexographic printing facilities that use more than 90 megagrams (100 tons) per year of volatile organic compounds.

- (b) Machines that have both coating units (apply a uniform layer of material across the entire width of a web) and printing units (forming words, designs and pictures) shall be included under this section rather than Section 3.03 of this regulation.
- (c) It shall be unlawful for any person to operate a facility subject to this regulation unless:
  - (1) The volatile fraction of ink, as it is applied to the substrate, contains 25% by volume or less of volatile organic compounds;
  - (2) The ink, as it is applied to the substrate, less water, contains 60% by volume or more nonvolatile material; or,
  - (3) The owner or operator installs and operates:
    - (A) A capture system that shall collect at least:
      - (i) 75% of the emissions from a publication rotogravure process; or
      - (ii) 65% of the emissions from a packaging rotogravure process; or
      - (iii) 60% of the emissions from a flexographic process; and
    - (B) Control equipment that reduces the volatile organic compound emissions from the capture system by at least 90% by weight.

### **SECTION 3.08 POLYESTER, VINYLESTER, GELCOAT, AND RESIN OPERATIONS**

Adopted 06/13/91 (700)  
Revised 12/09/93 (769)

- (a) This section shall apply to manufacturing operations involving the use of polyester, vinylester, gelcoat, or resin in which the styrene monomer is a reactive monomer for the resin.
- (b) It shall be unlawful for any person to cause or allow the application of polyester resin, vinylester resin, gelcoat, or any other resin unless the operation is conducted inside an enclosed area that is registered with the Agency. The exhaust from the operation shall be vented to the atmosphere through a vertical stack. For spray-coating applications of polyester resin, vinylester resin, gelcoat, or any other resin, the enclosed area shall incorporate a dry filter to control the overspray.
- (c) It shall be unlawful for any person to use a chopper gun or spray gun to apply polyester resin, vinylester resin, gelcoat, or any other resin, unless the coating is applied by the use of one of the following methods:
  - (1) High volume, low pressure (0.1 to 10 psig air pressure for atomization) spray equipment,
  - (2) Electrostatic spray equipment,
  - (3) Airless spray equipment, or
  - (4) Air-assisted airless spray equipment.

- (d) The provisions of Section 3.08(c) shall not apply to touchup and repair using a hand-held, air atomized spray gun that has a container for resin as part of the gun.
- (e) It shall be unlawful for any person to use any VOC-containing material for the cleanup of spray equipment, including resin lines, unless equipment for collecting the VOC-containing material and minimizing the evaporation to the atmosphere is employed. All VOC-containing materials that are flushed through the spray equipment or lines during cleanup shall be collected in a closed container.
- (f) It shall be unlawful for any person to use open containers for the storage or disposal of VOC-containing materials. Such containers and tanks shall be kept closed except when being cleaned or when materials are being added, mixed, or removed. Closed containers for solvent rag or paper disposal are required. Empty containers as defined in WAC 173-303-160 are exempt.

### **SECTION 3.09 AEROSPACE COMPONENT COATING OPERATIONS**

Adopted 12/11/80 (482)

Revised 02/11/82 (510), 06/13/91 (700), 12/09/93 (769)

- (a) This section shall apply to any operation in which coatings are applied to aerospace components.
- (b) It shall be unlawful for any person to cause or allow the application of any coating specified below that contains in excess of the following limits:

Type of Coating	VOC Content (excluding water)	
	Grams/Liter	(Lbs/Gal)
Military Aerospace Topcoat	420	(3.5)
Commercial Aerospace Topcoat	420	(3.5)
Military Aerospace Primer	350	(2.9)
Commercial Aerospace Primer	350	(2.9)
Temporary Protective Coating	250	(2.1)

- (c) It shall be unlawful for any person to cause or allow the application of any coating listed in Section 3.09(b) unless the coating is applied by the use of one of the following methods:
  - (1) High volume, low pressure (0.1 to 10 psig air pressure for atomization) spray equipment,
  - (2) Electrostatic spray equipment,
  - (3) Flow coat,
  - (4) Dip coat,
  - (5) Brush coat,

- (6) Trowel coat,
  - (7) Hand-held aerosol cans,
  - (8) Roll coat,
  - (9) Electrodeposition,
  - (10) Curtain coat, or
  - (11) Air brush.
- (d) It shall be unlawful for any person to use any VOC-containing material for the cleanup of spray equipment, including paint lines, unless equipment for collecting the VOC-containing material and minimizing the evaporation to the atmosphere is employed. All VOC-containing materials that are flushed through the spray equipment or lines during cleanup shall be collected in a closed container.
- (e) It shall be unlawful for any person to use open containers for the storage or disposal of VOC-containing materials. Such containers shall be kept closed except when being cleaned or when materials are being added, mixed, or removed. Closed containers for solvent rag or paper disposal are required. Empty containers as defined in WAC 173-303-160 are exempt.
- (f) The VOC limit for commercial aerospace topcoat in Section 3.09(b) shall become effective January 1, 1994, except for those topcoat tints that have not been qualified as of that date. All commercial aerospace topcoats must meet the VOC limit no later than January 1, 1995.