

## ARTICLE 2: GASOLINE MARKETING EMISSION STANDARDS

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

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.

### 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)

- (a) Section 2.06 shall apply to all bulk gasoline plants with an annual average daily gasoline throughput greater than 15,140 liters (4,000 gallons).
- (b) 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.
- (c) 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** **(in effect through August 31, 2011)**

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)

### (a) Applicability

This section applies to any facility that dispenses gasoline from a stationary storage tank with a rated capacity of more than 1,000 gallons into a motor vehicle fuel tank. 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.

### (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 (including any subsequent approval letters). However, any ISD system specified in a CARB executive order is not required.
- (2) **OWNER OR OPERATOR** means a person who owns, leases, supervises, or operates a facility subject to this regulation.

### (c) Stage 1 Vapor Recovery Requirements

#### (1) Installation Requirements

- (A) Owners or operators must install a CARB-certified Stage 1 vapor recovery system on any gasoline storage tank with a rated capacity of more than 1,000 gallons that is either located at a facility where the current annual gasoline throughput is greater than 200,000 gallons or installed after January 1, 1979.
- (B) Any person installing a CARB-certified Stage 1 vapor recovery system must install the system in accordance with the CARB executive order in effect on the date of installation.

#### (2) Maintenance Requirements

- (A) All Stage 1 vapor recovery systems shall be installed, operated, and maintained in accordance with the CARB executive order in effect on the date of installation. Defects listed in Table 1(a) or 1(b) are

evidence that the installed equipment is not operated or maintained in accordance with this requirement.

- (B) After June 1, 2005, all dual-point Stage 1 vapor recovery systems located at a facility required to be equipped with Stage 2 vapor recovery systems must be equipped with swivel adapters.

(3) Self-Inspection Requirements

Owners or operators must inspect each Stage 1 vapor recovery system between gasoline deliveries for the defects listed in Table 1(a) or 1(b), depending on the type of system installed, using the inspection procedures listed in the tables. However, if the facility receives more than one delivery to a tank in a day, the inspection is only required once per day.

Table 1(a)  
Dual-Point Stage 1 Defects

Equipment	Inspection Procedures	Defects
Dust Cap (tank cap on top of adapter)	<ul style="list-style-type: none"> <li>• Visually inspect the dust cap on both the fill and vapor risers.</li> <li>• Try to turn the dust cap on both the fill and vapor risers by hand.</li> </ul>	<ul style="list-style-type: none"> <li>• Cap gasket is missing or damaged.</li> <li>• Cap is missing or damaged.</li> <li>• Cap turns with hand pressure.</li> </ul>
Adapter Vapor Riser (brass fitting on tank riser)	Slowly depress poppet and check gasket and poppet alignment.	Poppet is inoperative, not aligned properly, or the gasket is damaged.
Adapter (brass fitting on tank riser) <i>(Not required for swivel adapters.)</i>	Try to turn the adapters on both the fill and vapor risers by hand.	Adapter turns with hand pressure.
Fill Tube (from adapter to bottom of tank)	Visually inspect the fill tube gasket, if clearly visible after removal of dust cap. <i>(Some fill tube assemblies may not allow observation of the fill tube gasket except by a service technician.)</i>	Fill tube gasket is damaged or missing.
Spill Bucket	Visually inspect the liquid level in the spill bucket and the condition of the drain valve.	<ul style="list-style-type: none"> <li>• Liquid level is more than 1 inch.</li> <li>• Drain valve is open or leaking vapors.</li> </ul>

Table 1(b)  
Coaxial Stage 1 Defects

Equipment	Inspection Procedures	Defects
Dust Cap (tank cap on top of adapter)	<ul style="list-style-type: none"> <li>• Visually inspect the dust cap on the fill riser.</li> <li>• Try to turn the dust cap on the fill riser by hand.</li> </ul>	<ul style="list-style-type: none"> <li>• Cap gasket is missing or damaged.</li> <li>• Cap is missing or damaged.</li> <li>• Cap turns with hand pressure.</li> </ul>
Adapter (brass fitting on tank riser)	Slowly depress the coaxial drop tube, check poppet gasket and poppet alignment.	Poppet is inoperative or out of alignment, poppet gasket is damaged, or spring is broken.
Adapter (brass fitting on tank riser)	Try to turn the adapter by hand.	Adapter turns with hand pressure.
Spill Bucket	Visually inspect the liquid level in the spill bucket and the condition of the drain valve.	<ul style="list-style-type: none"> <li>• Liquid level is more than 1 inch.</li> <li>• Drain valve is open or leaking vapors.</li> </ul>

(4) Corrective Action Requirements for Stage 1 Defects

- (A) Whenever a Stage 1 defect as described in Table 1(a) or 1(b) is discovered during a self-inspection, the owner or operator must repair it as soon as possible after the defect is discovered, but no later than the end of the next business day.
- (B) If the defect cannot be repaired by the end of the next business day after discovery, the owner or operator must not receive any gasoline deliveries to the tank where the defect is located until the defect is repaired.

(5) Recordkeeping Requirements

- (A) Owners or operators must keep a log of the results of each self-inspection, which must include the following:
- date of inspection,
  - name of person conducting inspection,
  - description of all defects found during the inspection, and
  - date and time of repair of the defects.

- (B) The log must be kept on-site at the facility and available for inspection for at least 2 years after the date the record was made.

(d) Stage 2 Vapor Recovery Requirements

(1) Installation Requirements

- (A) Owners or operators must install a CARB-certified Stage 2 vapor recovery system on:
  - (i) any existing gasoline tank located at a facility where the annual gasoline throughput is greater than 600,000 gallons for facilities located in King, Pierce, or Snohomish counties and greater than 840,000 gallons for facilities located in Kitsap County; or
  - (ii) on any gasoline tank with a rated capacity of more than 1,000 gallons installed after August 2, 1991 at a facility where the current annual gasoline throughput is greater than 200,000 gallons.
- (B) Any person installing a CARB-certified Stage 2 vapor recovery system must install the system in accordance with the CARB executive order in effect on the date of installation.

(2) Maintenance Requirements

- (A) All Stage 2 vapor recovery systems installed after April 1, 2003 must be Onboard Refueling Vapor Recovery (ORVR) compatible and must be installed, operated, and maintained in accordance with the CARB executive order in effect on the date of installation. However, ISD system installation is not required. Defects listed in Table 2(a) or 2(b) are evidence that the installed equipment is not operated or maintained in accordance with this requirement.
- (B) All Stage 2 vapor recovery systems installed prior to April 1, 2003 shall be installed, operated, and maintained in accordance with the CARB executive order in effect as of April 1, 2003, even if CARB later decertifies the system. In such a case, the installation of equipment determined by the manufacturer to be interchangeable with the original approved equipment is permitted. Defects listed in Table 2(a) or 2(b) are evidence that the installed equipment is not operated or maintained in accordance with this requirement.

(3) Self-Inspection Requirements

Owners or operators must inspect Stage 2 vapor recovery systems every day the facility is open for business for the defects listed in either Table 2(a) or 2(b), depending on the type of system installed, using the inspection procedures listed in the tables.

Table 2(a)  
Vapor-Balance Stage 2 Defects

Equipment	Inspection Procedures	Defects
Nozzle Spout	Pull back the boot to ensure the latch ring is on the spout.	Latch ring is missing.
Nozzle	Visually inspect the boot (bellows) for holes or slits.	No boot hole shall be more than ¼ inch diameter. No slit shall exceed ½ inch in length.
Nozzle	Visually inspect for leaking gasoline.	Visible gasoline leaks.
Nozzle	Visually inspect faceplate for missing or damaged surface area.	¼ or more of the circumference of the bellows faceplate is damaged or missing.
Nozzle (equipped with insertion interlock mechanism)	Compress the boot and note the tension on the trigger. Release the boot and note the tension on the trigger.	If the trigger is loose when the boot is compressed or the trigger is firm when the boot is released, the insertion interlock is defective.
Hose (from dispenser to nozzle) including Whip Hose	Visually inspect the hose for physical condition.	Hose has cuts, holes, is flattened, or kinked, or the fuel flow direction is incorrect (if marked on the hose).

Table 2(b)  
Vacuum-Assist Stage 2 Defects

Equipment	Inspection Procedures	Defects
Nozzle Spout Latch Coil	Visually inspect each nozzle for missing latch coils.	Latch coil is missing.
Nozzle	Visually inspect the mini-boot (bellows) for holes or slits.	More than ⅛ of the outer edge of the mini-boot is missing, or a slit is greater than 1½ inches long.
Nozzle	Visually inspect for leaking gasoline.	Visible gasoline leaks.
Hose (from dispenser to nozzle)	Visually inspect the hose.	Hose has cuts, holes, is flattened, or kinked, or the fuel flow direction is incorrect (if marked on the hose).

- (4) Corrective Action Requirements for Stage 2 Defects
  - (A) Whenever a Stage 2 defect as described in Tables 2(a) or 2(b) is discovered during a self-inspection, the owner or operator must repair it as soon as possible.
  - (B) If the defect cannot be repaired within one hour after discovery, the defective equipment must be removed from service until the defect is repaired.
- (5) Recordkeeping Requirements
  - (A) Owners or operators must keep a log of the results of each self-inspection, which must include the following:
    - time and date of the inspection,
    - person conducting the inspection,
    - a description of all defects found during the inspection, and
    - time and date of repair of any defects.
  - (B) The log must be kept on-site at the facility and available for inspection for at least 2 years after the date the record was made.

(e) Self-Inspection Training Requirements

- (1) Owners or operators of facilities with Stage 2 vapor recovery systems must provide training for all employees who are responsible for performing self-inspections of the Stage 1 and Stage 2 vapor recovery equipment within 30 days of hire and provide on-site refresher training for those employees at least once every calendar year.
- (2) The self-inspection training must include all of the following:
  - (A) The location, function, and operation of vapor recovery equipment.
  - (B) Why vapor recovery equipment must be inspected and maintained.
  - (C) How to inspect vapor recovery equipment.
  - (D) How to recognize a defect.
  - (E) Appropriate corrective actions when defects are discovered.
  - (F) How to keep the necessary records.
  - (G) The penalties for noncompliance.
- (3) The person providing the training must conduct the training in accordance with this section.
- (4) After conducting the training required by this section, the owner or operator must prepare a written training report that includes:
  - name and address of person conducting the training,
  - date of the training, and
  - names of the persons trained.

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

(f) Stage 2 Testing Requirements

(1) Testing Requirements

- (A) Owners or operators must obtain compliance tests of vacuum-assist Stage 2 vapor recovery systems at least once every 12 months, and tests of vapor-balance Stage 2 vapor recovery systems at least once every 24 months.
- (B) Each time a test is conducted, the test shall also include a review of the on-site records required by this rule including: training, self-inspections, gasoline throughput, and testing.
- (C) The person performing the tests must conduct the following compliance tests for each Stage 2 vapor recovery system:

Table 3  
Required 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 .....	TP-201.3 .....	March 17, 1999
	Dynamic Back Pressure.....	TP-201.4 .....	July 3, 2002
	Tank-Tie Test <sup>2</sup> .....	TP-201.3C .....	March 17, 1999
All Vacuum-Assist	Static Pressure Decay .....	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>2</sup> .....	TP-201.3C .....	March 17, 1999
Healy 600 G-70-165	Static Pressure Decay .....	TP-201.3 .....	March 17, 1999
	Vapor Line Vacuum Integrity Test.....	G-70-165 Exhibit 4.....	April 20, 1995
	Tank-Tie Test <sup>2</sup> .....	TP-201.3C .....	March 17, 1999
Healy 400 ORVR G-70-186	Static Pressure Decay .....	TP-201.3 .....	March 17, 1999
	Fill Neck Pressure Test.....	G-70-186 Exhibit 5.....	October 26, 1998
	Vapor Line Vacuum Integrity Test.....	G-70-186 Exhibit 4.....	October 26, 1998
	Tank-Tie Test <sup>2</sup> .....	TP-201.3C .....	March 17, 1999
Hirt System G-70-177-AA	Static Pressure Decay .....	TP-201.3 .....	March 17, 1999
	Air-to-Liquid Ratio.....	TP-201.5 .....	February 1, 2001
	Tank-Tie Test <sup>2</sup> .....	TP-201.3C .....	March 17, 1999

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

<sup>2</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 always be kept on-site to verify compliance.

(2) Testing Procedures

- (A) The person performing the tests must conduct the testing in accordance with the CARB test procedures contained in Table 3. Once each calendar year and before conducting any tests under this rule, a person performing CARB compliance tests must submit a written summary of their training and qualifications to perform the test to the Agency.
- (B) The tests listed in Table 3 are exempt from the requirements of Section 3.07 of Regulation I, however persons performing such tests must notify the Agency in writing at least 72 hours prior to conducting a test to provide the Agency an opportunity to observe the test.

(3) Failed Compliance Tests

Owners or operators must notify the Agency 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. This does not include any operation of the equipment necessary to conduct a retest.

(4) Test Reports

- (A) After the testing required by this section has been conducted, the owner or operator must obtain a written test report.
- (B) The written report must include:
- name and address of the tester,
  - date of the testing,
  - equipment tested,
  - test procedures used,
  - results of the tests,
  - any repairs or corrective actions necessary to pass the tests, and
  - results of the records review, including whether the on-site records comply with the requirements of this rule.

(5) Recordkeeping Requirements for Owners and Operators

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.

**SECTION 2.07 GASOLINE DISPENSING FACILITIES** Adopted 07/22/10 (1193)  
**(in effect as of September 1, 2011)**

(a) Applicability

(1) The requirements of Section 2.07 of this regulation apply to any facility that dispenses gasoline into a motor vehicle fuel tank 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;

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- (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.

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- (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.

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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.

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- (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.

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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 2 days after completion of the compliance test on-site.

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- (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** Adopted 10/14/93 (764)

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

- (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.