# REGULATION 8 ORGANIC COMPOUNDS RULE 39 GASOLINE BULK PLANTS AND GASOLINE CARGO TANKS

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## REGULATION 8 ORGANIC COMPOUNDS RULE 39 GASOLINE BULK PLANTS AND GASOLINE CARGO TANKS

(Adopted October 7, 1987)

8-39-100	GENERAL
0-39-100	GENERAL

**8-39-101 Description:** The purpose of this Rule is to limit emissions of organic compounds associated with gasoline transfer operations at gasoline bulk plants and organic compounds from gasoline cargo tanks.

(Amended 6/1/94; 4/15/09)

### 8-39-110 Deleted April 15, 2009

- **8-39-111 Exemption, Cargo Tanks:** The requirements of Sections 8-39-304.1, 304.2, 304.3, and 304.6 do not apply to gasoline cargo tanks that deliver exclusively to:
  - 111.1 Storage tanks with an actual capacity of less than 250 gallons.
  - 111.2 Storage tanks installed prior to February 18, 1987, with an annual throughput of less than 60,000 gallons, provided the storage tanks are exempt from Phase I requirements pursuant to Regulation 8, Rule 7.
  - 111.3 Storage tanks with a storage capacity of less than 550 gallons used primarily for the refueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code, provided such tanks are equipped with a submerged fill pipe.
  - 11.4 Storage tanks where the APCO determines that the Phase I gasoline vapor recovery requirements identified in Regulation 8, Rule 7 are not feasible.

(Amended 6/1/94; 4/15/09)

**8-39-112** Exemption, Gasoline Bulk Plants Without Phase I Vapor Recovery: Bulk gasoline plants that load exclusively to gasoline cargo tanks servicing stationary tanks without Phase I vapor recovery unit(s) pursuant to Section 8-39-111.2 are exempt from the requirements of Sections 8-39-302, 307.2, 308.1 and 401.2.

(Amended April 15, 2009)

**8-39-113** Exemption, Tank Gauging and Inspection: Any gasoline cargo tank may be opened for gauging or inspection provided that the tank is not pressurized or being loaded.

(Amended April 15, 2009)

**8-39-114 Exemption, Maintenance and Repair:** The requirements of Sections 8-39-304.4, 304.5, and 306 shall not apply to liquid gasoline spills and vapor leaks resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of gasoline into the atmosphere to the greatest extent practicable.

(Amended April 15, 2009)

**8-39-115** Exemption, CARB Certification: CARB certification requirements in this Rule do not apply to vapor recovery equipment or systems where the gasoline bulk plant owner or operator demonstrates that CARB has determined that such equipment or systems are not required to be CARB certified.

(Adopted April 15, 2009)

- **8-39-116 Limited Exemption, Aviation Gasoline:** The distribution of aviation gasoline to and from bulk plants:
  - 115.1 Is exempt from this Rule's CARB certification requirements of the vapor recovery system.
  - 115.2 Is exempt from the requirements of Sections 8-39-304.5 and 306 when sampling is required for quality assurance.

### 8-39-200 DEFINITIONS

**8-39-201 CARB Certified Vapor Recovery System:** A gasoline bulk plant vapor recovery system that has a valid certification issued by the California Air Resources Board (CARB), pursuant to Section 41954 of the California Health and Safety Code.

(Amended April 15, 2009)

**8-39-202 Gasoline:** Any petroleum distillate, including aviation gasoline and additives, that has a Reid vapor pressure of four (4.0) pounds or greater.

(Amended and Renumbered April 15, 2009)

**8-39-203 Gasoline Bulk Plant:** A storage and distribution facility that receives gasoline by gasoline cargo tanks, and loads it into gasoline cargo tanks for delivery to service stations and other distribution points.

(Amended and Renumbered April 15, 2009)

**8-39-204 Gasoline Cargo Tank:** Any container, including its associated pipes and fittings, that is attached to a vehicle used to transport gasoline and is required to be certified in accordance with Section 41962 of the California Health and Safety Code.

(Adopted April 15, 2009)

8-39-205 Liquid Leak Free: A liquid fill connector or vapor hose connector that does not leak liquid in excess of three drops per minute, or 10 milliliters per disconnect averaged over three consecutive disconnects, as set forth in CARB CP-202, Certification Procedure for Vapor Recovery Systems of Bulk Plants for gasoline bulk plant connectors, or CARB CP-204, Certification Procedure for Vapor Recovery Systems of Cargo Tanks for gasoline cargo tank connectors.

(Amended and Renumbered April 15, 2009)

**8-39-206 Loading Event:** Transferring liquid gasoline into and receiving vapors from a gasoline delivery vehicle, including all individual cargo tanks and compartments.

(Adopted April 15, 2009)

**8-39-207 Non-Methane Organic Compound (NMOC):** Any compound of carbon, excluding methane, carbon monoxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

(Adopted 6/1/94; Amended and Renumbered 4/15/09)

**8-39-208** Portable Maintenance Container: A portable vessel or tank with a capacity of less than 250 gallons, equipped with liquid and vapor hose connectors that temporarily stores gasoline.

(Adopted April 15, 2009)

**8-39-209** Reid Vapor Pressure: The vapor pressure of an organic liquid at 100 degrees Fahrenheit, except liquefied petroleum gases, as determined in accordance with the Manual of Procedures, Volume III, Method 13, the most current version of ASTM D323, or the equivalent method described in California Code of Regulations Title 13, Section 2297.

(Adopted April 15, 2009)

**8-39-210 Slop Tank:** Any permanent or fixed container that has the primary function of temporarily storing petroleum product and other liquids that have been collected during maintenance or loading operations and are not loaded into a gasoline cargo tank.

(Adopted April 15, 2009)

- **8-39-211** Submerged Fill Pipe: Any storage tank fill pipe that meets either of the following conditions:
  - 209.1 If the tank is filled from the top, the end of the discharge pipe is totally submerged when the liquid level is six (6) inches above the bottom of the tank.
  - 209.2 If the tank is filled from the side, the discharge pipe is totally submerged when the liquid level is 18 inches above the bottom of the tank.

(Amended and Renumbered April 15, 2009)

**8-39-212 Switch Loading:** The loading of an organic liquid with a Reid vapor pressure of less than 4.0 pounds into a gasoline cargo tank where the previous load was gasoline.

(Amended and Renumbered April 15, 2009)

**8-39-213 Total Organic Compound (TOC):** Any compound of carbon, including methane, excluding carbon monoxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

**8-33-214 Vapor Processing Unit:** Equipment designed to dispose of hydrocarbon vapors to prevent their emission into the atmosphere.

(Adopted April 15, 2009)

**8-39-215 Vapor Recovery System:** A system capable of collecting and disposing of hydrocarbon vapors to prevent their emission into the atmosphere.

(Adopted April 15, 2009)

**8-39-216 Vapor Leak Free (Bulk Plant):** Until July 1, 2009, a leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (I in.) from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses. Effective July 1, 2009, a gasoline bulk plant liquid fill connector, vapor hose connector, or pressure/vacuum (P/V) valve that does not leak vapor in excess of 3,000 parts per million (ppm) (expressed as methane) or 6 % of the Lower Explosive Limit (LEL), measured according to the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.

(Amended and Renumbered April 15, 2009)

**8-39-217 Vapor Leak Free (Gasoline Cargo Tank):** A gasoline cargo tank liquid fill connector, vapor hose connector or other fitting that does not leak vapor in excess of 100% of Lower Explosive Limit (LEL), measured according to the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.

(Amended and Renumbered April 15, 2009)

**8-39-218 Vapor Tight** (**Gasoline Cargo Tank**): A gasoline cargo tank that does not leak vapor in excess of the pressure decay and vapor leak standards set forth in CARB CP-204, Certification Procedure for Vapor Recovery Systems of Cargo Tanks.

(Amended and Renumbered April 15, 2009)

### 8-39-300 STANDARDS

### 8-39-301 Deleted April 15, 2009

**8-39-302 Gasoline Bulk Plant Emission Limitations:** Emissions of non-methane organic compounds from a gasoline bulk plant vapor recovery system shall not exceed 0.50 pounds per I,000 gallons of organic liquid loaded. Switch loading operations are subject to this standard. Where multiple vapor processing units are used, each vapor processing unit shall be subject to this standard.

(Amended 6/1/94; 4/15/09)

### 8-39-303 Deleted April 15, 2009

**8-39-304 Gasoline Cargo Tank Requirements:** An owner or operator of a gasoline cargo tank shall comply with the following requirements:

- 304.1 Vapor Integrity Requirement: An owner or operator of a gasoline cargo tank shall only operate, or allow the operation of, a gasoline cargo tank that displays a valid State of California decal, as required by Section 41962 of the Health and Safety Code, and which attests to the vapor integrity of the cargo tank.
- 304.2 Vapor Recovery Requirement: Any gasoline cargo tank loading at a gasoline bulk plant shall be equipped with and use a vapor recovery system certified pursuant to Section 41962 of the California Health and Safety Code.
- 304.3 Vapor Return Requirement: An owner or operator of a gasoline cargo tank shall not load at a gasoline bulk plant that is exempt from the Section 8-39-302 gasoline bulk plant emission limitation pursuant to Section 8-39-112 if any portion of the gasoline cargo tank's prior load was delivered to a storage tank equipped with a Phase I vapor recovery system.
- 304.4 Purging Requirement: An owner or operator of a gasoline cargo tank shall not purge gasoline vapor from the cargo tank to the atmosphere, at any time.
- 304.5 Drainage Requirement: An owner or operator of a gasoline cargo tank shall not drain or spill liquid gasoline from the cargo tank, discard it in sewers, store it in open containers, or handle it in any other manner that would result in its evaporation to the atmosphere.
- 304.6 Vapor Tight Requirement: The gasoline cargo tank shall be vapor tight.
- 304.7 Vapor Leak Requirement: Gasoline cargo tank liquid fill and vapor return connectors shall be vapor leak free (gasoline cargo tank). The cargo tank

- owner or operator must notify the bulk plant personnel immediately if the product or vapor connectors do not meet these vapor leak requirements.
- 304.8 Liquid Leak Requirements: Gasoline cargo tank liquid fill and vapor return connectors shall be liquid leak free. The cargo tank owner or operator must notify the bulk plant personnel immediately if the product or vapor connectors do not meet these liquid leak requirements.
- 304.9 Compatible Connectors Requirement: Effective July 1, 2009, an owner or operator of a gasoline cargo tank shall only load the gasoline cargo tank at a gasoline bulk plant if the gasoline cargo tank product and vapor connectors are compatible with the associated fittings of the gasoline bulk plant.
- 304.10 Maintenance Requirement: An owner or operator of a gasoline cargo tank shall maintain all equipment associated with the gasoline cargo tank in good working order.

(Amended April 15, 2009)

- **8-39-305** Gasoline Bulk Plant Maintenance and Repair: An owner or operator of a gasoline bulk plant shall comply with the following requirements:
  - 305.1 All equipment associated with gasoline delivery, loading and vapor recovery operations shall be in good working order.
  - 305.2 Effective January 10, 2012, prior to any operational procedure, maintenance and/or repair on the product or vapor hoses that requires opening the hoses to the atmosphere, a gasoline bulk plant owner or operator shall transfer any retained liquid gasoline in these hoses to either a portable maintenance container equipped with liquid and vapor hose connectors or to a slop tank through fixed piping or a liquid hose connector. The cover, seal, lid, or connector shall be in a closed position at all times except when the device is in use for liquid transfer, inspection, maintenance, or repairs.
  - 305.3 Any portable maintenance container or slop tank hose connectors shall be vapor leak free (bulk plant) and liquid leak free.

(Amended April 15, 2009)

**8-39-306 Operating Practices:** An owner or operator of a gasoline bulk plant shall not drain or spill liquid gasoline, discard it in sewers, store it in open containers, or handle it in any other manner that would result in its evaporation to the atmosphere.

(Amended April 15, 2009)

### 8-39-307 Loading Practices:

- 307.1 Compatible Connectors Requirement: Effective July 1, 2009, an owner or operator of a gasoline bulk plant shall inform all gasoline cargo tank owners or operators allowed to load at their facility of the liquid and vapor hose connectors required, that each cargo tank shall be allowed to only use compatible connectors, and that use of compatible connectors is necessary for continued access to the bulk plant.
- 307.2 An owner or operator of a gasoline bulk plant shall not load, or permit the loading of gasoline into or out of a gasoline bulk plant unless a CARB-certified vapor recovery system, or a vapor recovery system for which a complete application for certification has been submitted to CARB, is properly connected and used.

(Amended April 15, 2009)

- **8-39-308 Gasoline Bulk Plant Vapor Recovery System Requirements:** Vapor recovery systems are subject to the following requirements:
  - 308.1 Organic compound emissions from each delivery and loading operation shall be captured and controlled by a CARB Certified Vapor Recovery System.
  - 308.2 Vapor recovery systems shall be operated and maintained such that the gauge pressure at the cargo tank / vapor hose interface does not exceed 18.0 inches of water column during product loading operations.
  - 308.3 Vapor Leak Requirement: Gasoline bulk plant liquid fill connectors, vapor return connectors, and pressure/vacuum valves shall be vapor leak free (bulk plant).
    - 3.1 A violation of this section shall not occur if a connector leak is discovered by the bulk plant owner or operator and, within 8 hours of discovery of the leak, the connector is either (1) repaired and re-

- inspected to be leak-free (bulk plant), or (2) taken out of service. A connector taken out of service shall not be returned to service until it is repaired and re-inspected to be leak-free (bulk plant).
- 3.2 A violation of this section shall not occur if a P/V valve leak is discovered by the bulk plant owner or operator and, within 72 hours of discovery of the leak, the P/V valve is either (1) repaired and reinspected to be leak free (bulk plant) or (2) taken out of service. A P/V valve taken out of service shall not be returned to service until it is repaired and re-inspected to be leak-free (bulk plant).
- 308.4 Liquid Leak Requirements: Gasoline bulk plant liquid fill and vapor return connectors shall be liquid leak free.
  - 4.1 A violation of this section shall not occur if a leak is discovered by the bulk plant owner or operator and, within 8 hours of discovery of the leak, the connector is either (1) repaired and re-inspected to be liquid leak-free, or (2) taken out of service. A connector taken out of service shall not be returned to service until it is repaired and re-inspected to be liquid leak-free.
- 308.5 Effective January 10, 2011 a pressure gauge shall be installed on the vapor collection piping as close to the vapor hose connector as feasible. For bulk plants that utilize top loading arms, a pressure gauge shall be installed on the fixed vapor piping as close to the end or the top loading arm, as feasible.
- 308.6 Gauge pressure of each vapor hose shall be maintained below the CARB-certified set pressure of the pressure/vacuum valve(s) of the vapor recovery system at all times.

(Amended April 15, 2009)

### 8-39-400 ADMINISTRATIVE REQUIREMENTS

- **8-39-401** Equipment Installation and Modification: An owner or operator of a gasoline bulk plant who installs or modifies vapor recovery system equipment at a gasoline bulk plant shall meet the following requirements:
  - 401.1 Comply with the requirements of Regulation 2, Rule 1.
  - 401.2 Submit a complete application to CARB for certification or recertification pursuant to Section 41954 of the California Health and Safety Code before undertaking any of the following activities:
    - 2.1 Operation of a new or replacement vapor recovery system.
    - 2.2 Replacement or modification of equipment that would result in a greater gasoline loading capacity than the gasoline bulk plant's CARB certified throughput limits. CARB throughput limits shall not be exceeded unless a new CARB certification is issued that permits these higher throughput limits.
    - 2.3 Operation of a vapor recovery system in a mode not certified by CARB.
    - 2.4 Submittal of an application for a revised District Permit to Operate.

(Amended April 15, 2009)

- 8-39-402 Deleted April 15, 2009 8-39-403 Deleted April 15, 2009
- 8-39-404 Bulk Plant Monitoring, Inspection, Notification and Reporting Requirements: An owner or operator of a gasoline bulk plant shall develop and submit for APCO approval by October 1, 2010 a monitoring, inspection, notification and reporting plan that meets the following requirements, as applicable, and implement the approved plan on or before January 10, 2011:
  - 404.1 40 CFR Part 63, Subpart R, §63.424, §63.425, and §63.428.
  - 404.2 40 CFR Part 63, Subpart BBBBBB, §63.11087, §63.11088, §63.11089, §63.11092, §63.11093, §63.11094 and §63.11095.

### 8-39-500 MONITORING AND RECORDS

**8-39-501 Burden of Proof:** The burden of proof of eligibility for exemptions from this rule is on the applicant. Persons seeking an exemption under this rule shall maintain adequate records and furnish them to the APCO upon request.

(Amended April 15, 2009)

**8-39-502 Biennial Source Test:** The gasoline bulk plant owner or operator shall conduct a biennial source test not less than 18 months, but less than 30 months from the previous source test, in accordance with the provisions in Section 8-39-601. A copy of the final report including raw data sheets shall be submitted to the APCO (Attention: Source Test) within 60 days of the completed test. The gasoline bulk plant owner or operator shall retain on the site for a period of at least five (5) years a copy of the final report for each biennial source test.

(Adopted April 15, 2009)

### 8-39-600 MANUAL OF PROCEDURES

**8-39-601** Emission Rate Determination for Vapor Recovery Systems: Emissions of non-methane organic compounds from gasoline bulk plant vapor recovery system(s) shall be determined in accordance with the Manual of Procedures, Volume IV, ST-34, CARB Test Procedure TP-202.1 or EPA Method 25.

(Amended 6/1/94; 4/15/09)

**8-39-602** Emission Rate Determination for Vapor Balance System: The emission rates from vapor balance systems at gasoline bulk plants shall be determined in accordance with the Manual of Procedures, Volume IV, ST-3.

(Amended April 15, 2009)

**8-39-603** Back Pressure Determination from Vapor Recovery System: The back pressure from vapor recovery systems during unloading or loading of gasoline cargo tanks shall be determined in accordance with the Manual of Procedures, Volume IV, ST-34.

(Amended 6/1/94; 4/15/09)

**8-39-604 Vapor Tight (Gasoline Cargo Tanks):** The determination of vapor tight status for gasoline cargo tanks shall be in accordance with the Manual of Procedures, Volume IV. ST-33 or CARB Procedure TP-204.1 or TP-204.2.

(Amended April 15, 2009)

**8-39-605** Analysis of Samples: Reid vapor pressure analyses shall be conducted in accordance with the Manual of Procedures, Volume III, Method 13, the most current version of ASTM D323, or the equivalent method described in California Code of Regulations Title 13, Section 2297.

(Amended April 15, 2009)

**8-39-606 Vapor Leak Concentration Determination:** Determination of the concentration of vapor leaks shall be conducted in accordance with the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.