(Adopted January 9, 1976)(Amended May 5, 1978)(Amended October 14, 1979)
(Amended April 4, 1986)(Amended December 7, 1990)(Amended June 9, 1995)
(Amended May 14, 1999)(Amended August 1, 2025)

RULE 462 ORGANIC LIQUID LOADING

(a) Purpose

This rule is intended to control emissions of Volatile Organic Compounds (VOC) from Facilities that load Organic Liquids with a True Vapor Pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions into any tank truck, trailer, or railroad tank car and establish Contingency Measures for applicable ozone standards for the reduction of VOC.

(b) Applicability

(1) The provisions of this rule shall apply to all the Organic Liquid loading Facilities that are defined as Class A, B, or C Facilities pursuant to paragraphs (c)(2), (c)(3) and (c)(4), respectively, of this rule.

(2) Subdivision (i) shall not become applicable until the effective date of full approval of subdivision (i) by the United States Environmental Protection Agency (U.S. EPA) of the California State Implementation Plan as meeting the Contingency Measure requirements of the Clean Air Act Sections 172(c)(9) and 182(c)(9) for the Coachella Valley area regarding the 2008 and 2015 ozone National Ambient Air Quality Standards (NAAQS).

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) BACKGROUND is the ambient concentration of organic vapors in the air measured according to the U.S. EPA Method 21.

(2) CLASS "A" FACILITY is any Facility which loads 20,000 gallons (75,700 liters) or more on any one day of Organic Liquids into any tank truck, trailer, or railroad tank car.

(3) CLASS "B" FACILITY is any Facility:

(A) which was constructed before January 9, 1976 and loads more than 4,000 gallons (15,140 liters) but not more than 20,000 gallons (75,700 liters) of Gasoline on any one day into any tank truck, trailer, or railroad tank car.

(B) which was constructed before January 9, 1976 and loads not more than 4,000 gallons (15,140 liters) of Gasoline on any one day, but more than 500,000 gallons (1,892,500 liters) of Gasoline in any one calendar year, into any tank truck, trailer, or railroad tank car.

(c) (3) (C) which was constructed after January 9, 1976 and loads not more than 20,000 gallons (75,700 liters) of Gasoline on any one day into a tank truck, trailer or railroad tank car.

(4) CLASS "C" FACILITY is any Facility existing before January 9, 1976 which loads not more than 4,000 gallons (15,140 liters) of Gasoline on any one day and not more than 500,000 gallons in any one calendar year, into any tank truck, trailer, or railroad tank car.

(5) CONTINGENCY MEASURE is a control strategy to further reduce VOC emissions if the Coachella Valley area fails to comply with the requirements specified in Clean Air Act, Sections 172(c)(9) and 182(c)(9) regarding the 2008 and 2015 ozone NAAQS. These requirements are making reasonable further progress, attaining the applicable ozone NAAQS by a specified attainment date, and meeting any applicable milestones.

(6) COUPLER is a component of Transfer Equipment at the interface between the end of the liquid loading line and the loading vessel.

(7) EXEMPT COMPOUNDS are as defined in Rule 102 – Definition of Terms (Rule 102).

(8) FACILITY is as defined in Rule 1302 – Definitions.

(9) FACILITY VAPOR LEAK is an escape of organic vapors from a source other than a tank truck, trailer or railroad tank car in excess of 3,000 ppm as methane above background when measured according to U.S. EPA Method 21. A Facility Vapor Leak source does not include liquid spillage or condensate resulting from Liquid Leaks.

(10) GASOLINE is any petroleum distillate or petroleum distillate/alcohol blend or alcohol, except any liquefied petroleum gas (LPG), which has a True Vapor Pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions and is used as a fuel for internal combustion engines.

(11) INACCESSIBLE COMPONENT is a component of Transfer Equipment located over five (5) meters above ground when access is required from the ground; or located over two (2) meters away from a platform when access is required from the platform; or located at a position which would require the elevation of a monitoring personnel higher than two (2) meters above permanent support surfaces.

(12) LIQUID LEAK is a dripping of liquid organic compounds at a rate in excess of three drops per minute from any single leak source other than the liquid fill line and vapor line of disconnect operations.

(c) (13) LIQUID LEAK FROM DISCONNECT OPERATIONS is defined as: (a) more than two milliliters of liquid drainage per disconnect from a top loading operation; or (b) more than ten milliliters of liquid drainage per disconnect from a bottom loading operation. Such liquid drainage shall be determined by computing the average drainage from three consecutive disconnects at any one loading arm.

(14) OPTICAL GAS IMAGING (OGI) DEVICE is an infrared camera with a detector capable of visualizing gases in the 3.2-3.4 micrometer waveband.

(15) ORGANIC LIQUID is any liquid compound containing the element carbon that has a True Vapor Pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions excluding liquefied petroleum gases (LPG), methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and Exempt Compounds.

(16) RESIDUAL LIQUID is Organic Liquid remaining in the Coupler after disconnection.

(17) SUBMERGED FILL LOADING is a type of Organic Liquid loading operations where the discharge opening is completely submerged when the liquid level above the bottom of the vessel is eight centimeters (3.2 inches) or higher.

(18) SWITCH LOADING is a transfer of Organic Liquids with a True Vapor Pressure of less than 1.5 psia (77.5 mm Hg) under actual loading condition into any tank truck, trailer or railroad tank car that was loaded with an Organic Liquid with a True Vapor Pressure of 1.5 psia (77.5 mm Hg) or greater immediately preceding the transfer.

(19) TRANSFER EQUIPMENT shall consist of all the components of the liquid loading line between any storage tanks, the liquid pump and the transporting vessel, the vapor return line from the transporting vessel to the storage tank, and the Vapor Recovery System and/or Vapor Disposal System.

(20) TRANSPORT VESSEL is a tank truck, trailer or railroad tank car that is equipped to receive and transport Organic Liquid.

(21) TRANSPORT VESSEL VAPOR LEAK is an escape of organic vapors from a Transport Vessel in excess of 100 percent of the lower explosive limit when monitored according to the California Air Resources Board (CARB) Vapor Recovery Test Procedure TP-204.3 – Determination of Leak(s).

(22) TRUE VAPOR PRESSURE is the vapor pressure of a liquid at the temperature at which a product is stored in a stationary container.

(23) VAPOR DISPOSAL SYSTEM is a control equipment designed and operated to reduce VOC emissions into the atmosphere.

(c) (24) VAPOR RECOVERY SYSTEM is a vapor gathering system which is capable of collecting and returning discharged hydrocarbon vapors and gases during loading of Organic Liquids into Transport Vessels, back to a stationary storage container, or into an enclosed process system.

(25) VISIBLE VAPORS are any VOC vapors detected with an OGI Device, when operated and maintained in accordance with manufacturer training or certification, or equivalent CARB training, user manuals, specifications, and recommendations. Visible Vapors do not include liquid spillage or condensate resulting from Liquid Leaks.

(26) VOLATILE ORGANIC COMPOUND (VOC) is as defined in Rule 102.

(d) Requirements

(1) Loading Requirements at Class A Facilities

(A) Each Class A Facility shall be equipped with

(i) a CARB certified Vapor Recovery System and/or Vapor Disposal System, or;

(ii) a South Coast AQMD approved Vapor Recovery System and/or Vapor Disposal System only when such system does not require CARB certification pursuant to Health and Safety Code 41954.

(B) Each Vapor Recovery System and/or Vapor Disposal System at a Class A Facility shall be equipped with a continuous monitoring system (CMS) that is installed, operated, and maintained according to the manufacturer's specifications and is approved by the Executive Officer.

(C) The transfer of Organic Liquids shall be accomplished in such a manner that the displaced organic vapors and air are vented under design conditions to the Vapor Recovery System and/or Vapor Disposal System.

(D) Each Vapor Recovery System and/or Vapor Disposal System shall

(i) reduce the emissions of VOCs to 0.08 pound or less per thousand gallons (10 grams per 1,000 liters) of Organic Liquid transferred and shall demonstrate compliance with the VOC emission limit by conducting periodic source testing every 60 months pursuant to the requirements in paragraphs (f)(1) and (f)(8); and

(ii) upon CMS plan approval or no later than February 1, 2027, reduce the emissions of VOCs to 0.04 pound or less per thousand gallons (5 grams per 1,000 liters) of Organic Liquid transferred and shall demonstrate compliance with the VOC emission limit by conducting

periodic source testing every 60 months pursuant to the requirements in paragraphs (f)(1) and (f)(8).

(d) (1) (E) Any Class A Facility transferring Gasoline into any truck, trailer, or railroad tank car shall be designed and operated for bottom loading only.

(F) The Transfer Equipment shall be operated and maintained so that there are no overfills, Facility Vapor Leaks, Liquid Leaks, or Liquid Leaks from disconnect operations.

(G) Effective August 1, 2026, the Transfer Equipment shall be operated and maintained so that there are no Visible Vapors.

(H) The backpressure in the Vapor Recovery System and/or Vapor Disposal System shall not exceed 18 inches of water column pressure.

(2) Loading Requirements at Class B Facilities

(A) Each Class B Facility shall be equipped with

(i) a CARB certified Vapor Recovery System and/or Vapor Disposal System, or;

(ii) a South Coast AQMD approved Vapor Recovery System and/or Vapor Disposal System only when such system does not require CARB certification pursuant to Health and Safety Code 41954.

(B) Such system shall be designed and operated to recover at least 90 percent of the displaced vapors.

(C) The backpressure in the Vapor Recovery System and/or Vapor Disposal System shall not exceed 18 inches of water column pressure.

(D) Any Class B Facility transferring Gasoline into any truck, trailer, or railroad tank car, shall be designed for bottom loading only.

(E) The Transfer Equipment shall be operated and maintained so that there are no overfills, Facility Vapor Leaks, Liquid Leaks, or Liquid Leaks from disconnect operations.

(F) Effective August 1, 2026, the Transfer Equipment shall be operated and maintained so that there are no Visible Vapors.

(3) Loading Requirements at Class C Facilities

(A) Each Class C Facility shall be equipped and operated for Submerged Fill Loading or bottom fill loading. All Gasoline or equivalent True Vapor Pressure Organic Liquids shall be transferred in this manner.

(B) The Transfer Equipment shall be operated and maintained so that there are no overfills, Liquid Leaks, or Liquid Leak from disconnect operations.

(4) Loading Requirements for Transport Vessels

(d) (4) (A) The owner or operator shall not allow loading or unloading of Organic Liquid or other use or operation of any Transport Vessel unless the vessel has a valid certification of vapor integrity as defined by the applicable CARB Certification and Test Procedures, pursuant to Health and Safety Code Section 41962(g).

(B) Transport Vessel Vapor Leaks from dome covers, pressure vacuum vents or other sources shall be determined in accordance with the CARB Vapor Recovery Test Procedure TP-204.3 – Determination of Leak(s).

(C) The Transport Vessel shall be operated so that there are no Transport Vessel Vapor Leaks or Liquid Leaks.

(5) Switch Loading

Uncontrolled Switch Loading is prohibited except at Class C Facilities.

(6) Leak Inspection Requirements

(A) The owner or operator of any Class A, B, or C Facility shall be required to perform an inspection of the Transfer Equipment handling Organic Liquids for Facility Vapor Leaks, Liquid Leaks, or Visible Vapors on one of the following schedules:

(i) monthly if sight, sound, and smell are used as detection methods and additionally, effective August 1, 2026, monthly using an OGI Device in accordance with paragraph (d)(7); or

(ii) quarterly if an organic vapor analyzer (OVA) is used to monitor for Facility Vapor Leaks, and additionally, effective August 1, 2026, monthly using an OGI Device in accordance with paragraph (d)(7).

(B) Each detection of a Facility Vapor Leak, Liquid Leak, or Visible Vapors shall be repaired or replaced within three (3) calendar days. The repaired or replacement component shall be reinspected the first time the component is in operation after the repair or replacement.

(7) Optical Gas Imaging Inspections

(A) The owner or operator conducting an OGI inspection shall complete a manufacturer's certification or training program, or equivalent CARB training for the OGI Device used to conduct the inspection.

(B) The owner or operator conducting OGI inspections shall operate and maintain the OGI Device in accordance with the manufacturer's specifications and recommendations.

(C) In lieu of an OGI inspection, the owner or operator may elect to use an alternative inspection method approved in writing by U.S. EPA that is

equivalent or more stringent than a monthly OGI inspection. The owner or operator seeking to use an alternative inspection method shall submit the written approval from U.S. EPA to the Executive Officer for their review and independent approval. The owner or operator shall not use an alternative inspection method unless and until approved by the Executive Officer.

(d) (8) South Coast AQMD Inspection Procedures

(A) The owner or operator of a Facility may remove Residual Liquid from a Coupler prior to retesting by South Coast AQMD personnel for compliance determination with subparagraphs (d)(1)(F), (d)(1)(G), (d)(2)(E), (d)(2)(F), and (d)(3)(B).

(B) Effective August 1, 2026, the owner or operator of a Facility shall be in violation of subparagraph (d)(1)(G) or (d)(2)(F), respectively, if South Coast AQMD personnel detect Visible Vapors unless the owner or operator concurrently demonstrates, or no later than one (1) calendar day after detection for an Inaccessible Component, using an appropriate analyzer in accordance with the test method in paragraph (f)(4) that the Visible Vapors are not a Facility Vapor Leak.

(e) Compliance Schedule

The owner or operator of any Class A, B, or C Facility subject to this rule shall comply with the requirements of subdivision (d) in accordance with the following schedule:

(1) For Class A Facilities subject to paragraph (d)(1):

(A) If required by Health and Safety Code 41954 to equip a Facility with a CARB certified Vapor Recovery System and/or Vapor Disposal System, within 30 calendar days after completing construction of a new or modified Vapor Recovery System and/or Vapor Disposal System, a written request shall be submitted to CARB for certification of the new or modified Vapor Recovery System and/or Vapor Disposal System.

(B) No later than 180 calendar days after completion of construction, any Vapor Recovery System and/or Vapor Disposal System shall be CARB certified or South Coast AQMD approved pursuant to clauses (d)(1)(A)(i) or (d)(1)(A)(ii), respectively.

(C) No later than February 1, 2027, Title V facilties with a remaining permit term of 3 or more years as of August 1, 2025, or non-Title V Facilities, that do not have an existing permit condition that complies with subparagraph

(d)(1)(D), shall submit a permit modification to indicate a VOC emission limit per (d)(1)(D).

(e) (1) (D) By February 1, 2026 for a new or modified CMS, submit a CMS Plan to the Executive Officer or designee for approval prior to operation.

(2) For Class B Facilities subject to paragraph (d)(2):

(A) If required by Health and Safety Code 41954 to equip a Facility with a CARB certified Vapor Recovery System and/or Vapor Disposal System, within 30 calendar days after completing construction of a new or modified Vapor Recovery System and/or Vapor Disposal System, a written request shall be submitted to CARB for certification of the new or modified Vapor Recovery System and/or Vapor Disposal System.

(B) No later than 180 calendar days after completion of construction, any Vapor Recovery System and/or Vapor Disposal System shall be CARB certified or South Coast AQMD approved, pursuant to clauses (d)(2)(A)(i) or (d)(2)(A)(ii), respectively.

(f) Compliance Determination/Test Methods

(1) Compliance with the emission limit of organic vapors as specified in the subparagraph (d)(1)(D) shall be determined according to U.S. EPA Method 25A, 25B or South Coast AQMD Method 501.1, as applicable.

(2) Continuous Monitoring System required pursuant to subparagraph (d)(1)(B) shall be in compliance with Code of Federal Regulations Title 40 Part 63 Subpart R Section 63.427 and Code of Federal Regulations Title 40 Part 60 Appendix B, as applicable.

(3) Compliance with the vapor recovery efficiency as specified in the subparagraph (d)(2)(B) shall be determined according to the CARB Vapor Recovery Certification Procedure CP-202 – Certification Procedure for Vapor Recovery Systems of Bulk Plants or, for the Vapor Recovery System and/or Vapor Disposal System subject to clause (d)(2)(A)(ii), the South Coast AQMD Approval Procedure for Vapor Recovery Systems of Bulk Plants dated May 14, 1999.

(4) Determinations of Facility Vapor Leaks as defined in the paragraph (c)(9) shall be conducted according to U.S. EPA Method 21.

(5) Compliance with the requirements of South Coast AQMD approval for Vapor Recovery System and/or Vapor Disposal Systems as specified in subparagraphs (d)(1)(A) and (d)(2)(A) shall be determined according to the South Coast AQMD Approval Procedure for Vapor Recovery Systems for Bulk Plants dated May 14,

1999. All testing required in the South Coast AQMD Approval Procedure for Vapor Recovery and/or Disposal System shall be conducted by testing firms/laboratories that have been approved by the South Coast AQMD for the specific tests under the Laboratory Approval Program.

(f) (6) Any other alternative test method approved in writing by the South Coast AQMD, CARB, and U.S. EPA may be used only when none of the test methods identified in this subdivision are applicable.

(7) When more than one test method or set of test methods are specified for any testing, a violation of any requirements of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

(8) Source Testing

The owner or operator of a Facility required to conduct source testing shall:

(A) Prior to conducting source testing to demonstrate compliance, submit a source test protocol for approval to the Executive Officer;

(B) Submit an updated or new source test protocol if there are any modifications to the Vapor Recovery System and/or Vapor Disposal System or if the Executive Officer requests an updated or new source test protocol;

(C) Submit a source test protocol for facilities that have not already been conducting periodic source testing by August 1, 2026, and conduct the source test by August 1, 2027;

(D) Conduct source testing pursuant to the most recent source test protocol approved by the Executive Officer; and

(E) Submit the source testing report to the Executive Officer within 60 days of completing all sampling for source testing.

(9) The True Vapor Pressure of Organic Liquid shall be determined by ASTM Method D-323 for reid vapor pressure, or ASTM Method D-6377 correlated to ASTM D-323, and converted to True Vapor Pressure using applicable nomographs in EPA AP-42 or South Coast AQMD and EPA approved nomographs. The actual storage temperature used for determining True Vapor Pressure shall be 70 degrees Fahrenheit for Organic Liquids that are stored at ambient temperatures, and actual storage temperature for Organic Liquids that are stored at above ambient temperatures.

(g) Recordkeeping Requirements

(1) The owner or operator of any Class A, B, or C Facility, in order to verify the classification of such Facility, shall maintain a daily log of the throughput and a

summary of the throughput for the calendar year to date, of the liquid organic compounds subject to the provisions of this rule. A log showing daily compliance shall suffice to satisfy this requirement.

(g) (2) The owner or operator of any Class A, B, or C Facility shall maintain records for verification of compliance with the requirements in paragraphs (d)(6) and (d)(7). The records shall include inspection dates, description of leaks detected, repair/replacement dates, and reinspection dates.

(3) All records shall be maintained at the Facility for at least two years or a period of five years for a Title V Facility and shall be made available to the Executive Officer upon request.

(h) Distribution of Responsibilities

(1) The owner and operator of any Class A, B, or C Facility shall be responsible and liable for complying with the provisions of paragraphs (d)(1), (d)(2), (d)(3), (d)(6), (d)(7), and (f)(8) and subdivisions (e) and (g) of this rule, and for maintaining the equipment at the Facility in such condition that it can comply with the requirements of this rule if properly operated. If employees of the owner or operator of the Facility supervise or affect the transfer operation, the owner or operator of the Facility shall be responsible for ensuring that the transfer operation complies with all requirements of this rule and that the Transfer Equipment is properly operated.

(2) The owner, operator, and driver of a Transport Vessel shall be responsible and liable for complying with paragraphs (d)(4) and (d)(5) of this rule.

(i) Ozone Contingency Measure

(1) On and after 60 days following the effective date of a final rule by U.S. EPA that the conditions described in Clean Air Act Sections 172(c)(9) and 182(c)(9) have occurred in the Coachella Valley area regarding the 2008 or 2015 ozone NAAQS, the Contingency Measure specified in paragraph (i)(2) shall be implemented.

(2) The owner or operator of any Class A or B Facility shall be required to perform an inspection of Transfer Equipment for Visible Vapors at least once every two (2) calendar weeks using an OGI Device in accordance with paragraph (d)(7).

(j) Exemptions

(1) The provisions of subparagraphs (d)(1)(F), (d)(1)(G), (d)(2)(E), (d)(2)(F) and (d)(3)(B) shall not apply to components found in violation of Facility Vapor Leaks, Liquid Leaks, or Visible Vapors detected and recorded originally by the owner or

operator, provided the repair or replacement of applicable equipment is completed within the specified period as given in subparagraph (d)(6)(B).

(j) (2) The provisions of subparagraphs (d)(1)(A), and (d)(1)(B) shall not apply to Vapor Recovery Systems and/or Vapor Disposal Systems which vent displaced hydrocarbon vapors to an adjacent refinery flare or other combustion device that receives gaseous streams from other refinery sources.

(3) The provisions of subparagraph (d)(6)(A) for the monthly inspection using an OGI Device shall not apply to Class C Facilities.

(4) The provisions of Rules 466 and 466.1 shall not apply to Facilities subject to this rule.

(5) The provisions of subparagraphs (d)(6), (d)(7), and (d)(8) shall not apply to equipment subject to Rule 1173.