

RULE 447 ORGANIC LIQUID LOADING

Adopted 1-14-74

(Amended 12-6-78, 5-15-79, 8-31-82, 11-29-83, 11-20-84, 4-18-89, 4-3-90, 4-30-91, 11-16-93,
9-5-96, 4-3-97, 12-4-97, 04-02-98)**INDEX****100 GENERAL**

- 101 PURPOSE
- 102 APPLICABILITY
- 110 EXEMPTION, LOW VAPOR PRESSURE MATERIALS

200 DEFINITIONS

- 201 BACKGROUND
- 202 BULK PLANTS
- 203 BULK TERMINAL
- 204 CALIFORNIA AIR RESOURCES BOARD-CERTIFIED VAPOR RECOVERY SYSTEM
- 205 EXEMPT COMPOUND
- 206 GASOLINE VAPORS
- 207 LEAK FREE
- 208 LOADING FACILITY
- 209 ORGANIC LIQUID
- 210 VAPOR TIGHT
- 211 VOLATILE ORGANIC COMPOUND (VOC)

300 STANDARDS

- 301 VAPOR RECOVERY REQUIREMENTS, BULK TERMINALS
- 302 VAPOR RECOVERY REQUIREMENTS, BULK PLANTS
- 303 CALIFORNIA AIR RESOURCES BOARD-CERTIFIED VAPOR RECOVERY SYSTEM
- 304 EQUIPMENT MAINTENANCE
- 305 VAPOR DIAPHRAGM REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS (Not Included)**500 MONITORING AND RECORDS**

- 501 TESTING PROCEDURE
- 502 RECORDS

This Page Intentionally Left Blank

100 GENERAL

- 101 **PURPOSE:** To limit emissions from the loading of organic liquids.
- 102 **APPLICABILITY:** The requirements of this rule shall apply to the loading of organic liquids into any tank truck, trailer, or railroad tank car from a bulk plant or a bulk terminal.
- 110 **EXEMPTION, LOW VAPOR PRESSURE ORGANIC LIQUIDS:** The loading of organic liquids having a vapor pressure less than 0.5 psia under actual loading conditions is exempt from this rule.

200 DEFINITIONS

- 201 **BACKGROUND:** A reading as methane on a portable hydrocarbon detection instrument which is determined at least three (3) meters upwind from the affected device to be inspected and uninfluenced by any specific emission point.
- 202 **BULK PLANT:** An organic liquid distribution facility which receives organic liquid from a refinery or bulk terminal by tank truck and distributes the organic liquid by railroad tank car or tank truck to motor vehicles as defined in Rule 449, TRANSFER OF GASOLINE INTO VEHICLE FUEL TANK or stationary storage containers.
- 203 **BULK TERMINAL:** An organic liquid distribution facility which receives organic liquid from the refinery by means other than truck.
- 204 **CALIFORNIA AIR RESOURCES BOARD-CERTIFIED VAPOR RECOVERY SYSTEM:** A vapor recovery system which has been certified by the California Air Resources Board pursuant to Section 41954 of the Health and Safety Code.
- 205 **EXEMPT COMPOUND:** For the purposes of this rule, "exempt compound" has the same meaning as in Rule 101—GENERAL PROVISIONS AND DEFINITIONS.
- 206 **GASOLINE VAPORS:** The reactive organic compounds in the displaced vapors including any entrained liquid gasoline.
- 207 **LEAK FREE:** A liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed one (1) fluid ounce, averaged over three disconnects.
- 208 **LOADING FACILITY:** Any stationary source with organic liquid loading equipment.
- 209 **ORGANIC LIQUID:** Any liquid which contains volatile organic compounds and has a total vapor pressure greater than or equal to 0.5 psia at actual loading conditions.
- 210 **VAPOR TIGHT:** A concentration of total organic compounds, measured one (1) cm from any source, which does not exceed 10,000 ppm (expressed as methane) above background, as determined by a method specified in Section 501.3.
- 211 **VOLATILE ORGANIC COMPOUND (VOC):** For the purposes of this rule, "volatile organic compound" has the same meaning as in Rule 101—GENERAL PROVISIONS AND DEFINITIONS.

300 STANDARDS

- 301 **VAPOR RECOVERY REQUIREMENTS; BULK TERMINALS:** A person shall not transfer or permit the transfer of organic liquids into any tank truck, trailer or railroad tank car from a bulk terminal unless the emissions to the atmosphere do not exceed 0.08 pounds of VOC per one thousand (1,000) gallons of organic liquids transferred as determined by a method specified in Section 501.1.
- 302 **VAPOR RECOVERY REQUIREMENTS; BULK PLANTS:** A person shall not transfer or permit the transfer of organic liquids into any tank truck, trailer or railroad tank car from a bulk plant unless the emissions to the atmosphere do not exceed 0.6 pounds of VOC per one thousand (1,000) gallons of organic liquids transferred as determined by a method specified in Section 501.1.
- 303 **CALIFORNIA AIR RESOURCES BOARD CERTIFIED VAPOR RECOVERY SYSTEM:** Effective May 31, 1991 a person shall not load gasoline as defined in RULE 448, GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS into any tank truck, trailer, or railroad tank car from a bulk plant or bulk terminal unless the bulk plant or bulk terminal is equipped with a California Air Resources Board-certified vapor collection and disposal system.
- 304 **EQUIPMENT MAINTENANCE:** All equipment associated with loading facilities shall be maintained to be leak free and vapor tight.
- 305 **VAPOR DIAPHRAGM REQUIREMENTS:** Diaphragms used in vapor storage tanks shall be maintained such that the volatile organic compound concentration in the airspace above the diaphragm does not exceed 3,000 parts per million, expressed as methane, as determined by a method specified in Section 501.2.

400 ADMINISTRATIVE REQUIREMENTS (Not Included)**500 MONITORING AND RECORDS**

- 501 **TESTING PROCEDURE:** A result by any of the below listed test methods which shows non-compliance with any provision of the rule shall constitute a violation of the rule.
- 501.1 **CONTROL DEVICE:** Control efficiency and emission rates of control devices shall be determined by EPA Method 18, 25, 25A, 25B, or California Air Resources Board Test Procedure TP-202.1 or TP-203.1.
- 501.2 **DIAPHRAGM AIRSPACE:** Concentrations in the airspace above vapor diaphragms shall be determined by EPA Test Method 18 or California Air Resources Board Test Method 150, 1-100, or Test Procedure TP-204.3.
- 501.3 **LEAK DETECTION:** EPA Reference Method 21 shall be used to determine vapor tight condition.
- 501.4 **VAPOR PRESSURE:** Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879-83 or ASTM D-323-82.
- 501.5 **DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION:** Compounds exempted from the VOC definition shall be determined in accordance with ASTM D 4457-85 or ARB method 432. If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.
- 502 **RECORDS:** Persons subject to this rule shall maintain, at the site, records of the results of any testing performed in accordance with Section 501 for three years and make those records available for review by the Air Pollution Control Officer upon request.