

**AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO**

**DRAFT PROPOSED AMENDMENTS TO
RULE 61.2 – TRANSFER OF ORGANIC COMPOUNDS
INTO MOBILE TRANSPORT TANKS**

WORKSHOP REPORT

The San Diego County Air Pollution Control District (District) held a public webinar on November 19, 2020, to discuss and receive input on the draft proposed amendments to Rule 61.2 – Transfer of Organic Compounds into Mobile Transport Tanks. A meeting notice was mailed to each permit holder that may be subject to the rule and chamber of commerce in the region, as well as the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB). Additionally, a meeting notice was posted on the District’s website and distributed to interested parties including through the County of San Diego’s electronic mail service.

The workshop was attended by 22 people. A summary of the comments and District responses are provided below:

1. WORKSHOP COMMENT

Does the rule also apply to the transfer of diesel into mobile transport tanks?

DISTRICT RESPONSE

The rule would apply to the transfer of diesel if diesel is transferred into a mobile transport tank that previously held gasoline or other VOC-containing fuel (a practice known as switch loading) potentially displacing or generating VOC vapors.

2. WORKSHOP COMMENT

What type of fuels are classified as VOC and therefore subject to the rule?

DISTRICT RESPONSE

Gasoline and/or ethanol fuel are the main types of fuels subject to this rule. Additionally, any fuel that meets the definition of “VOC” as defined in Rule 61.0 – Definitions Pertaining to the Storage and Handling of Organic Compounds would be subject to the rule.

3. WORKSHOP COMMENT

What types of permitted facilities may be subject to Rule 61.2?

DISTRICT RESPONSE

Examples of permitted facilities that may be subject to this rule include: a) private companies and military installations that load gasoline and/or ethanol into intermediate refuelers to provide fuel to on-site equipment; and b) bulk plant and bulk terminals that load gasoline and/or ethanol into mobile transport tanks for distribution to other facilities or gas stations throughout the county.

4. WORKSHOP COMMENT

The proposed amendments to Rule 61.2 lower the applicability of the rule to mobile transport tanks having a capacity of greater than 120 gallons. Does the 120-gallon capacity threshold also apply to the stationary storage tanks?

DISTRICT RESPONSE

The proposed 120-gallon capacity threshold applies only to the capacity of the mobile transport tanks.

5. WORKSHOP COMMENT

How did the District determine the proposed emission limit of 0.08 pounds of non-methane organic compounds (NMOC) per 1,000 gallons of VOC loaded specified in Subsection (c)(6)(i)?

DISTRICT RESPONSE

As described in EPA Comment No. 11 below, EPA determined, based on the limits specified in analogous rules in other California air districts, that the emission limit of 0.08 pounds of NMOC per 1,000 gallons is feasible and should be included in the rule.

6. WORKSHOP COMMENT

How did the District determine the requirement for the 95% control efficiency specified in Subsection (c)(9)(i)? Is splash loading allowed?

DISTRICT RESPONSE

The proposed 95% control efficiency specified in Subsection (c)(9)(i) is consistent with the control efficiency found in analogous rules in other California air districts. Splash loading is not allowed since existing Subsection (c)(10) requires that all VOC transfers into mobile transport tanks be done by submerged loading.

7. WORKSHOP COMMENT

How would compliance with the proposed 95% control efficiency specified in Subsections (c)(9)(i) and (c)(9)(ii) be verified?

DISTRICT RESPONSE

Compliance would be determined by verifying that there is a CARB-certified vapor recovery system (certified to control 95% of vapors) installed at the bulk plants or bulk terminals, and that there is a CARB-certified vapor recovery system installed on the mobile transport tank. The control efficiency will not be separately measured or calculated.

8. CARB COMMENT

CARB has no official comments at this time.

9. EPA COMMENT

The District should remove the exemption from the bottom loading requirements for transfers conducted by the military specified in Subsection (b)(5).

DISTRICT RESPONSE

The District agrees and has proposed deleting the military's exemption from the bottom loading requirements as recommended.

10. EPA COMMENT

The District should lower the existing 550-gallon applicability threshold for mobile transport tanks.

DISTRICT RESPONSE

The District agrees and has proposed lowering the applicability for mobile transport tanks to greater than 120 gallons as recommended, consistent with the definition of "Cargo Tank" as specified in the California Vehicle Code Section 34003.

11. EPA COMMENT

The District should lower the emission factor specified in Subsection (c)(6)(i) to 0.08 pounds of NMOC per 1,000 gallons of VOC loaded to be consistent with analogous rules of other California air districts.

DISTRICT RESPONSE

The District agrees and has proposed lowering the emission factor as recommended.

AMF:jl
11/25/20

RULE 61.2. TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS (~~Rev. Effect. 7/26/00~~ Rev. Adopted & Effective (date of adoption))

(a) **APPLICABILITY**

Except as otherwise provided in Section (b) Exemptions, this rule is applicable to the transfer of any volatile organic compound (VOC) into a mobile transport tank with a capacity of greater than 550-120 gallons (~~2,082-454~~ liters) ~~or greater~~. It is also applicable to the transfer of any liquid compound, regardless of its vapor pressure, into any mobile transport tank with a capacity of greater than 550-120 gallons (~~2,082-454~~ liters) ~~or greater~~ where the transfer involves the displacement or results in the generation of VOC vapors.

(b) **EXEMPTIONS**

(1) Transfer into any mobile transport tank from any stationary tank specified in Rule 11 – Exemptions from Rule 10 Permit Requirements shall not be subject to the provisions of Section (c) Standards of this rule.

(2) The provisions of Subsection (c)(4) shall not apply to any bulk plant in operation prior to March 1, 1984, and for which the throughput does not exceed 500,000 gallons (1,892,700 liters) per year of VOC. To qualify for this exemption, the owner or operator of the bulk plant shall maintain monthly records of VOC and diesel fuel throughputs that demonstrate the applicability of the exemption. Records shall be maintained on-site for at least two years and shall be made readily available to the District upon request.

(3) The provisions of Subsection (c)(4) shall not apply during the calibration of the marker inside a cargo tank when done in accordance with the San Diego County Department of Weights and Measures test procedure.

(4) The provisions of Subsections (c)(6)(i) and (c)(8) shall not apply to any bulk plant or bulk terminal where the VOC throughput does not exceed 5,000,000 gallons (18,927,000 liters) per year. To qualify for this exemption, the owner or operator of the bulk plant shall maintain monthly records of VOC and diesel fuel throughputs that demonstrate the applicability of the exemption. Records shall be maintained on-site for at least two years and shall be made readily available to the District upon request.

~~(5) The provisions of Subsection (c) (10) shall not apply to any bulk plant or bulk terminal owned by any branch of the United States Armed Forces.~~

(65) The provisions of this rule, except for Subsections (c)(3), (c)(7), and (c)(10), shall not apply to the transfer of VOC liquid from any United States military ship, provided that the total annual throughput for such transfers occurring in San Diego County does not exceed 21,000 gallons (79,494 liters) per year. It shall be the responsibility of any person claiming this exemption to maintain monthly records of VOC liquid transfer. The records shall be maintained on-site for at least two years and made readily available to the District upon request.

(76) This rule shall not apply to:

(i) Emergency work that the Air Pollution Control Officer determines is necessary to protect persons or property from imminent exposure to danger or damage;

(ii) VOC liquid transfers involving less than 500 gallons (1,893 liters) from one compartment to another within the same mobile transport tank; and

(iii) VOC liquid transfers to any mobile transport tank from any disabled mobile transport tank which cannot be driven for the purpose of facilitating the hauling of the disabled vehicle to a repair facility.

(c) **STANDARDS**

(1) No person shall transfer or allow the transfer of VOC from any stationary storage tank into any mobile transport tank, ~~each with a capacity of more than 550 gallons (2,082 liters)~~, unless 90 percent by weight a California Air Resources Board (CARB) certified vapor recovery system is permanently installed and used, which prevents 95% by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with the transfer, ~~are prevented~~ from being released to the atmosphere.

(2) There shall be no fugitive vapor leaks along the vapor transfer path. For purposes of this rule the vapor transfer path is that combination of piping, hoses, valves, fittings, storage tanks, saturator tanks, vapor processor, and other devices through which hydrocarbon vapors are transferred, stored, or processed to meet the requirements of this rule. The vapor transfer path shall include the interface between a mobile transport tank ~~having a capacity greater than 550 gallons (2,082 liters)~~ and the stationary storage tank facility vapor control fittings. The vapor transfer path shall not include any mobile transport tank, vapor control processor exhaust, or designated vapor control system vent from which the vapor-air mixtures are released after passing through a vapor processor.

There shall be no fugitive vapor leaks from any pressure/vacuum relief valve unless the vapors have passed through a vapor processor, except at bulk plants where a vapor processor is not required by this rule.

(3) No person shall transfer or allow the transfer of VOC into any mobile transport tank as described above when there are any fugitive liquid leaks along the liquid path including the transport tank and associated fittings through which the VOC are being transferred. There shall be no spillage upon disconnect at the loading head-transport tank interface except for spillage which would normally occur when the equipment is handled in a manner designed to minimize spillage. Equipment used to transfer fuel shall be free of defects and properly maintained in a manner designed to minimize spillage.

(4) No person shall transfer or allow the transfer of compounds not subject to the requirements of this rule into any mobile transport tank, ~~having a capacity of more than 550 gallons (2,082 liters)~~ which was transporting VOC or VOC vapor prior to said transfer unless at least 90 percent by weight a CARB certified vapor recovery system is permanently installed and used, which prevents 95% by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with the transfer, ~~are prevented~~ from being released to the atmosphere.

(5) No person shall displace or allow the displacement of vapors of compounds not subject to the requirements of this rule into a saturator using a VOC unless ~~at least 90 percent by weight a CARB certified vapor recovery system is permanently installed and used, which prevents 95% by weight~~ of all organic compound vapors resulting from transfers into mobile transports at the facility, ~~are prevented~~ from being released to the atmosphere. This includes any venting losses associated with such transfer.

(6) No person shall transfer or allow the transfer of any liquid into any mobile transport tank ~~having a capacity of more than 550 gallons (2,082 liters)~~ if the transfer displaces VOC, unless:

(i) ~~The displaced vapors are vented to a vapor recovery or disposal unit where the emissions from the unit into the atmosphere do not exceed 0.29 lbs of non-methane organic compounds per 1,000 gallons (35 milligrams of non-methane organic compounds per liter) of the liquid that displaces the VOC vapor air mixtures.~~ A CARB certified vapor recovery system is properly connected and used.

Such systems shall not emit into the atmosphere more than 0.08 lbs of non-methane organic compounds per 1,000 gallons (9.6 milligrams of non-methane organic compounds per liter) of VOC loaded, and

(ii) The pressure does not exceed 18 inches of water gauge and the vacuum does not exceed six inches of water gauge in the mobile transport tank vapor space or the vapor space of any of its compartments during the transfer.

(7) The hydrocarbon vapor concentration measured at a distance of 1/2 inch (1.3 cm) or more from the bladder in any bladder tank shall not exceed 500 parts per million by volume (ppmv) measured as propane or 1,375 ppmv measured as methane.

(8) Every product line at each loading rack connected to the vapor recovery system shall be equipped with a dual automatic shutoff overfill prevention system. Each system shall consist of:

(i) A fill meter with automatic flow shutoff at a preset fill quantity; and

(ii) A transport tank compartment high liquid level thermistor or optic sensor-activated automatic loading shutdown system; or

(iii) A float switch type liquid level sensor overfill prevention system, if a loading rack is not compatible with (ii) above.

In lieu of (i), and (ii) or (iii) above, each loading rack shall be equipped with a combination of overfill devices and/or procedures, approved in writing by the Air Pollution Control Officer, that is at least as effective in preventing overfill spillage as the sum of (i), and (ii) or (iii) above.

Each loading rack shutdown system shall, upon overfill sensor activation, automatically stop all liquid transfer to the transport tank(s) being loaded. The system shall be designed so that after sensor activation the additional liquid quantity transferred (meter overrun) shall not exceed 3.0% of the full-level volume of the tank compartment being loaded.

(9) No person shall transfer or allow the transfer of VOC from any mobile transport tank into any other mobile transport tank, ~~each with a capacity of more than 550 gallons (2,082 liters)~~, unless:

(i) ~~90 percent~~ 95% by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with the transfer, are prevented from being released to the atmosphere, and

(ii) ~~90 percent~~ 95% by weight of the hydrocarbon vapors generated by daily cycles of heating and cooling in the mobile transport tank from which the VOC are transferred are prevented from being released to the atmosphere. This emission limit applies only when the mobile transport is stationary.

(10) No person shall transfer or allow the transfer of VOC into any mobile transport tank unless the liquid transferred enters within six inches of the bottom of the mobile transport tank or compartment.

(11) A maintenance program, designed to ensure that the vapor collection and/or vapor recovery/disposal systems are in continuous compliance with the provisions of this rule, shall be submitted to the Air Pollution Control Officer by the equipment owner within 45 days of a request. The owner shall adhere to the maintenance plan as approved by the Air Pollution Control Officer.

(12) No person shall install a Phase I vapor recovery system unless it is certified by the ~~State of California Air Resources Board (CARB)~~, pursuant to Section 41954 of the California Health and Safety Code.

(d) **TEST METHODS**

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

Testing shall be performed in accordance with the following:

(1) Mobile transport tanks shall be certified and tested annually using ARB Certification Procedure CP-204 - Certification Procedure for Vapor Recovery Systems of Cargo Tanks (~~CP-204~~) and ARB Test Method TP-204.1 - Determination of Five Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks. Ongoing testing shall be performed using either ARB Test Method TP-204.1, or ARB Test Method TP-204.2 - Determination of One Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks ~~as approved by Environmental Protection Agency (EPA), or the most recent applicable test methods, test procedures, and certification procedures approved by CARB.~~

(2) Vapor control systems at bulk plants and bulk terminals shall be tested using the ARB Test Methods TP-202.1 - Determination of Emission Factor of Vapor Recovery Systems of Bulk Plants and TP-203.1 - Determination of Emission Factor of Vapor Recovery Systems of Terminals, respectively, ~~as they exist on July 26, 2020~~ or the most recent applicable test methods approved by CARB.

(3) Fugitive leaks shall be tested using either EPA Method 21 - Determination of Volatile Organic Leaks or ARB Test Method TP-204.3 - Determination of Leak(s), ~~as they exist on July 26, 2000~~ or the most recent applicable test methods approved by CARB.

(4) Any other test procedure approved by EPA and ARB for determining the performance of systems used to control VOC emissions from the transfer of organic compounds into mobile transport tanks may be used.

All test procedures shall be performed in accordance with a protocol approved in writing by the Air Pollution Control Officer.