

Air Pollution Control Board

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Air Pollution Control District

Director

R. I. Sommerville

July 1, 1999

TO:

Workshop Participants and Other Interested Parties

Other Interested Parties

FROM:

Richard J. Smith Assistant Director

AMENDMENTS TO RULE 61.2 -TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

WORKSHOP REPORT

On May 27, 1999, the District conducted a public workshop to discuss the proposed amendments to Rule 61.2 - Transfer of Organic Compounds Into Mobile Transport Tanks. The workshop report and final amended Rule 61.2 are attached for your review.

The rule will likely be scheduled for public hearing in October 1999.

If you have any questions, please call Angela Durr at (858) 694-3413 or me at (858) 694-3303.

RICHARD J. SMITH

Kichard J. Smith

Assistant Director

Attachment

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AIR POLLUTION CONTROL DISTRICT SAN DIEGO COUNTY

AMENDED RULE 61.2 TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

WORKSHOP REPORT

A workshop notice was mailed to all companies and government agencies in San Diego County that may be subject to the proposed amended Rule 61.2 - Transfer of Organic Compounds into Mobile Transport Tanks. Notices were also mailed to all Economic Development Corporations and Chambers of Commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

The workshop was held on May 27, 1999, and was attended by three people. Written comments were also submitted. The comments and District responses are provided below.

1. WORKSHOP COMMENT

Subsection (c)(10) specifying test methods has been deleted and Section (d) added to include the new test methods. Will this result in any new additional testing requirements? What will be the impact of this revision on the facilities subject to Rule 61.2?

DISTRICT RESPONSE

There will be no additional testing requirements for the sources subject to Rule 61.2. Subsection (c)(10) in the current rule included test methods that have since been replaced. New Section (d) specifies the latest test methods that are currently being used by the District and ARB. This revision will not have any impact on affected facilities.

2. WORKSHOP COMMENT

Which test methods would apply to the operation of a transfer loading arm?

DISTRICT RESPONSE

The transfer loading arm would be subject to the fugitive liquid leak and liquid spillage standards of Section (c)(3) and should be inspected using either EPA Method 21 "Determination of Volatile Organic Leaks" or ARB Test Method TP-204.3 "Determination of Leak(s)."

3. <u>WORKSHOP COMMENT</u>

What test methods apply to the mobile transport tanks and who should perform these tests?

DISTRICT RESPONSE

Mobile transport tanks are certified and tested annually using ARB "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." The owner of the mobile transport tank is responsible for the testing of the tanks. The testing results must be sent to ARB to receive the certification sticker.

4. WRITTEN COMMENT

Subsection (b)(6) exempts transfers of volatile organic compound (VOC) liquid from or to United States military ships up to 6,500 gallons per year at any single location. The exemption limit of 6,500 gallons per year should be increased to 21,000 gallons per year to allow for contingencies in increased military naval activity.

DISTRICT RESPONSE

The District agrees. Subsection (b)(6) has been revised to specify that under this exemption, the annual throughput for VOC liquid transfer within San Diego County must not exceed 21,000 gallons. Subsection (b)(6) also specifies that the sources subject to this exemption will have to comply with the fugitive liquid leaks and liquid spillage standards of Sections (c)(3), (c)(7), and (c)(10) of the rule.

5. EPA COMMENT

Subsection (b)(6) exempts transfers of VOC liquid from or to United States military ships up to 6,500 gallons per year at any single location. The State Implementation Plan (SIP) version of Rule 61.2 does not allow such exemption. The District should either delete this proposed exemption or demonstrate that its addition is not a relaxation prohibited by Sections 110(l) and 193 of the Federal Clean Air Act (FCAA).

DISTRICT RESPONSE

VOC emissions associated with operations subject to the new exemption in Subsection (b)(6) are negligible. The calculations using both EPA AP-42 emission factors and the emission factors from the source test conducted by the District under actual operating conditions show that the transfer of 6,500 gallons of unleaded gasoline will result in 55 lbs per year of VOC emissions. The transfer of 21,000 gallons of gasoline from the Navy ships which will be allowed by the revised Subsection (b)(6) will produce, at maximum, 179 lbs per year. This represents 0.03% of total allowable VOC emissions from all gasoline transfer operations subject to Rule 61.2.

This increase in VOC emissions is insignificant and will not interfere with the District's attainment demonstration and reasonable further progress for attaining the National Ambient Air Quality Standard for ozone as required by Section 110(1) of the FCAA.

The amount of VOC emission increase as a result of the exemption in Subsection (b)(6) is not a relaxation prohibited by Section 193 of the FCAA. Since 1990, the District adopted a number of rules that reduced VOC emissions in San Diego County by more than 1,500 tons per year. These emission reductions will definitely offset the 179 lbs per year of VOC emission increase resulting from the exemption of the Navy operations from the add on emission control requirements of Rule 61.2. This will satisfy the requirements of Section 193 of the FCAA.

6. EPA COMMENT

The test methods specified in Section (d) must be approved by EPA. Section (d)(1) specifies ARB Test Method TP-204, which has not yet been approved by EPA. Pending approval, EPA Method 27 should be added to Section (d)(1).

DISTRICT RESPONSE

EPA Region IX notified the District that ARB Test Method TP-204 will be approved in the near future. Rule 61.2 has been revised to include language that requires EPA approval of TP-204 prior to using the test method.

6/30/99 AD:ls

SAN DIEGO AIR POLLUTION CONTROL DISTRICT

PROPOSED AMENDED RULE 61.2

Proposed amended Rule 61.2 is to read as follows:

RULE 61.2. TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

(a) APPLICABILITY

Except as otherwise provided in Section (b), this rule is applicable to the transfer of any volatile organic compound (VOC) into a mobile transport tank with a capacity of 550 gallons (2,082 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 550 gallons (2,082 liters) or greater where the transfer involves the displacement or results in the generation of VOC vapors of volatile organic compounds.

(b) **EXEMPTIONS**

- (1) Transfer into any mobile transport tank from any stationary tank specified in Rule 11(e) shall not be subject to the provisions of Section (c) 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 either 5,000,000 gallons (18,927,300 18,925 kiloliters) per year of VOC volatile organic compounds or 5,000,000 gallons (18,927,300 18,925 kiloliters) per year of diesel fuel. 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. Two full years of records do not have to be made available until September 1, 1992.
- (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 <u>VOC</u> throughput of volatile organic compounds does not exceed 5,000,000 gallons (18,927,300 18,925 kiloliters) 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. Two full years of records do not have to be made available until September 1, 1992.
- (5) The provisions of Subsection (c) (10) (11) shall not apply to any bulk plant or bulk terminal owned by any branch of the United States Armed Forces.
- (6) This rule shall not apply to any transfer of VOC liquid from or to any United States Navy ship used primarily for purposes of maintenance for other ships provided that the total annual throughput for such transfers occurring at a stationary source does not exceed 6,500 gallons (24,605 liters) per year at any single location. 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 (79,493 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.

(7)(6) 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 <u>VOCs volatile organic</u> eompounds from any stationary storage tank into any mobile transport tank, each with a capacity of more than 550 gallons (2.082 2080 liters), unless 90 percent 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 <u>VOCs</u> volatile organic eompounds 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 <u>VOCs</u> volatile organic compounds 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 2080 liters) which was transporting VOCs volatile organic compounds or VOC vapor of volatile organic compounds prior to said transfer unless at least 90 percent 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) After December 31, 1984, no 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 volatile organic compound unless at least 90 percent 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 2080 liters) if the transfer displaces VOCs volatile organic compounds, 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 <u>VOCvolatile organic empound</u> vapor-air mixtures, and
 - (ii) The pressure does not exceed 18 inches of water gauge and the vacuum does not exceed 6-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 and
 - (iii) A loading rack which is not compatible with the dual automatic shutoff and shall prevent transfer into transport tanks relying on a A float switch type liquid level sensor overfill prevention system, if a loading rack is not compatible with (ii) above; or

In lieu of (i), (ii) and (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) and/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.

Loading racks that are not required to have the above overfill prevention system as a condition of an Authority to Construct or Permit to Operate existing on July 1, 1988, shall be equipped with the above system on or before April 1, 1989.

- (9) No person shall transfer or allow the transfer of <u>VOCs volatile organic</u> compounds from any mobile transport tank into any other mobile transport tank, each with a capacity of more than 550 gallons (2.082 2080 liters), unless
 - (i) 90 percent 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 by weight of the hydrocarbon vapors generated by daily cycles of heating and cooling in the mobile transport tank from which the <u>VOCs</u> volatile organic compounds are transferred are prevented from being released to the atmosphere. This emission limit applies only when the mobile transport is stationary.
- (10) Testing used to demonstrate compliance with the requirements of this rule shall be done in accordance with the following test methods: (Rev. Effective 10/16/90)
 - (i) Transport tanks shall be tested using State of California Air Resources Board (ARB) Method 2-5 "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks" or ARB Executive Order G-70-106 "Test Procedure Gasoline Cargo Tanks". The test procedures used shall be those in effect on October 16, 1990.
 - (ii) Vapor control systems at bulk plants and bulk terminal shall be tested using the applicable test methods that are specified in the State of California Air Resources Board (ARB) "Stationary Source Test Methods-Volume 2", as it exists on October 16, 1990, for determining exhaust emissions; and in the District's Manual of Procedures, as it exists on October 16, 1990, for determining aspects of compliance not addressed in ARB's "Stationary Source Test Methods Volume 2". An applicable test method is one that is specifically designed for the type of system to be tested. Equivalent U.S. Environmental Protection Agency (EPA) test methods, as determined by the Air Pollution Control Officer and EPA, may be used to determine exhaust emissions. All test methods and procedures used to determine compliance are required to have written approval from the Air Pollution Control Officer prior to their use.
- (10)(11) No person shall transfer or allow the transfer of <u>VOCs</u> volatile organic eompounds into any mobile transport tank unless the liquid transferred enters within six inches of the bottom of the mobile transport tank or compartment.
- (11)(12) 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.

(d) TEST METHODS

Testing used to demonstrate compliance with the requirements of this rule shall be done in accordance with the following test methods:

- State of California Air Resources Board (ARB) Executive Order G 70-106 "Test Procedure Gasoline Cargo Tanks," "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 they exist on (date of adoption). approved by Environmental Protection Agency (EPA).
- (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 (date of adoption).

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

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

<u>Test procedures shall be performed in accordance with a protocol approved in writing by the Air Pollution Control Officer.</u>

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Air Pollution Control Board

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Pam Slater District 3
Ron Roberts District 4
Bill Horn District 5

Air Pollution Control District

R. J. Sommerville Director

November 15, 1999

TO:

Workshop Participants and Other Interested Parties

FROM:

Richard J. Smith Assistant Director

RULE 61.2 - TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

Proposed amended Rule 61.2 was presented at a public workshop on May 27, 1999. It included an exemption for a specific U.S. Navy gasoline transfer operation and provided updates and clarifications. On September 30, 1999, the District received comments from the California Air Resources Board (ARB) (see attached). In response to these comments, further amendments are being proposed as follows:

- 1. Subsection (b)(2) that exempts bulk plants in operation prior to March 1, 1984, from the emission control requirements of Subsection (c)(4) is being deleted. According to District information, there are no sources in San Diego County that would be subject to this exemption.
- 2. An additional requirement is being added to Section (c) Standards, to specify that all Phase I vapor recovery systems installed to comply with the rule must be certified by ARB, in accordance with the Health and Safety Code Section 41954.

A copy of proposed amended Rule 61.2 is attached for your review. Additional changes to Rule 61.2 after the workshop are double underlined. Changes to Rule 61.2 in response to ARB comments are shown by italics.

If you have any questions or comments regarding these proposed rule changes, or would like to schedule a meeting to discuss them, please contact Angela Durr at (858) 694-3413, Natalie Zlotin at (858) 694-3312, or me at (858) 694-3303.

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RICHARD J. SMITH

Assistant Director

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Attachments

SAN DIEGO AIR POLLUTION CONTROL DISTRICT

PROPOSED AMENDED RULE 61.2

Proposed amended Rule 61.2 is to read as follows:

RULE 61.2. TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

(a) APPLICABILITY

Except as otherwise provided in Section (b), this rule is applicable to the transfer of any volatile organic compound (VOC) into a mobile transport tank with a capacity of 550 gallons (2,082 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 550 gallons (2,082 liters) or greater where the transfer involves the displacement or results in the generation of VOC vapors of volatile organic compounds.

(b) **EXEMPTIONS**

- (1) Transfer into any mobile transport tank from any stationary tank specified in Rule 11(e) shall not be subject to the provisions of Section (c) 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 either 5,000,000 gallons (18,927,300 18,925 kiloliters) per year of VOC volatile organic compounds or 5,000,000 gallons (18,927,300 18,925 kiloliters) per year of diesel fuel. 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. Two full years of records do not have to be made available until September 1, 1992.
- (2)(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.
- (3)(4) The provisions of Subsections (c)(6)(i) and (c)(8) shall not apply to any bulk plant or bulk terminal where the <u>VOC</u> throughput of volatile organic compounds does not exceed 5,000,000 gallons (18,927,300 18,925 kiloliters) 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 <u>on-site</u> for at least two years and shall be made <u>readily</u> available to the District upon request. Two full years of records do not have to be made available until September 1, 1992.
- (4)(5) The provisions of Subsection (c) (10)(11) shall not apply to any bulk plant or bulk terminal owned by any branch of the United States Armed Forces.
- (5)(6) This rule shall not apply to any transfer of VOC liquid from or to any United States Navy ship used primarily for purposes of maintenance for other ships provided that the total annual throughput for such transfers occurring at a stationary source does not exceed 6,500 gallons (24,605 liters) per year at any single location. 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 (79,493 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.

(6)(7) 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 <u>VOCs</u> volatile organic compounds from any stationary storage tank into any mobile transport tank, each with a capacity of more than 550 gallons (2,082 2080 liters), unless 90 percent 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 <u>VOCs</u> volatile organic compounds 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 <u>VOCs</u> volatile organic compounds 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 2080 liters) which was transporting VOCs volatile organic compounds or VOC vapor of volatile organic compounds prior to said transfer unless at least 90 percent 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) After December 31, 1984, no 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 volatile organic compound unless at least 90 percent 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 ⁷transport tank having a capacity of more than 550 gallons (2.082 2080 liters) if the transfer displaces VOCs volatile organic compounds, 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 VOCvolatile-organic compound vapor-air mixtures, and
 - (ii) The pressure does not exceed 18 inches of water gauge and the vacuum does not exceed 6-<u>six</u> 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; <u>or and</u>
 - (iii) A loading rack which is not compatible with the dual automatic shutoff and shall prevent transfer into transport tanks relying on a A float switch type liquid level sensor overfill prevention system, if a loading rack is not compatible with (ii) above; or.

In lieu of (i), (ii) and (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) and/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.

Loading racks that are not required to have the above overfill prevention system as a condition of an Authority to Construct or Permit to Operate existing on July 1, 1988, shall be equipped with the above system on or before April 1, 1989.

- (9) No person shall transfer or allow the transfer of <u>VOCs</u> volatile organic compounds from any mobile transport tank into any other mobile transport tank, each with a capacity of more than 550 gallons (2.082 2080 liters), unless
 - (i) 90 percent 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 by weight of the hydrocarbon vapors generated by daily cycles of heating and cooling in the mobile transport tank from which the <u>VOCs</u> volatile organic compounds are transferred are prevented from being released to the atmosphere. This emission limit applies only when the mobile transport is stationary.
- (10) Testing used to demonstrate compliance with the requirements of this rule shall be done in accordance with the following test methods: (Rev. Effective 10/16/90)
 - (i) Transport tanks shall be tested using State of California Air Resources Board (ARB) Method 2-5 "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks" or ARB Executive Order G-70-106 "Test Procedure Gasoline Cargo Tanks". The test procedures used shall be those in effect on October 16, 1990.
 - (ii) Vapor control systems at bulk plants and bulk terminal shall be tested using the applicable test methods that are specified in the State of California Air Resources Board (ARB) "Stationary Source Test Methods-Volume 2", as it exists on October 16, 1990, for determining exhaust emissions; and in the District's Manual of Procedures, as it exists on October 16, 1990, for determining aspects of compliance not addressed in ARB's "Stationary Source Test Methods-Volume 2". An applicable test method is one that is specifically designed for the type of system to be tested. Equivalent U.S. Environmental Protection Agency (EPA) test methods, as determined by the Air Pollution Control Officer and EPA, may be used to determine exhaust emissions. All test methods and procedures used to determine compliance are required to have written approval—from the Air Pollution Control Officer prior to their use.
- (10)(11) No person shall transfer or allow the transfer of <u>VOCs</u> volatile organic compounds into any mobile transport tank unless the liquid transferred enters within six inches of the bottom of the mobile transport tank or compartment.
- (11)(12) 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 (ARB), pursuant to Section 41954 of the Health and Safety Code.

(d) TEST METHODS

Testing used to demonstrate compliance with the requirements of this rule shall be done in accordance with the following test methods:

- (1) Mobile transport tanks shall be certified and tested annually using either

 State of California Air Resources Board (ARB) Executive Order G-70-106 "Test

 Procedure Gasoline Cargo Tanks," "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 they exist on (date of adoption), approved by Environmental Protection Agency (EPA).
- (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 (date of adoption).

<u>Test procedures shall be performed in accordance with a protocol approved in writing by the Air Pollution Control Officer.</u>

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

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

STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD



FAX TRANSMISSION

P.O. Box 2815 Sacramento, CA 95812 FAX: (916) 327-5621

Date: September 30, 1999

Pages to follow: 2

For Transmission Problems: Marilyn Jackson, (916) 322-2289

Rule Review Comments

Please Deliver As Soon As Possible To:

Ms. Natalie Zlotin, Senior Air Pollution Control Engineer San Diego County Air Pollution Control District Telephone Number: (858) 694-3303 FAX Number: (858) 694-2730.

From: Peter Puglia, (916) 324-1129

On May 6, 1999, we received for our review the April 29, 1999, draft rule, which was considered at a public workshop held by your District staff on May 27, 1999. Following the workshop, and prior to publication of our official comments on the April 29, 1999, version of the rule, District staff revised the rule and we received the revised draft rule, dated June 30, 1999, on July 13, 1999, for our review.

Rule 61.2 Transfer of Organic Compounds Into Mobile Transport Tanks (for amendment)

We believe that our comments are important to the effectiveness of the rule. We recommend that the District revise the rule consistent with our comments before presenting the rule to your District Board for amendment. We have no comments on the proposed amendments to the rule, but we do have comments on the rule itself. Our comments were discussed on September 16, 1997, with District staff during our review of the District's 1997 Regional Air Quality Strategy. Our comments identify improvements to the rule that we believe will satisfy the requirement that the District adopt all feasible measures in accordance with Health & Safety Code section 40914, and which the District agreed to consider during the present rule amendment process.

Date: 9/30/99 Time: 12:17:08 PM

If you have any questions about our comments, please contact Mr. Steve Brisby, Manager of our Fuels Section, Criteria Pollutants Branch, Stationary Source Division, at (916) 322-6019.

Thank you for involving the Air Resources Board staff in your rule review process.

Date: September 30, 1999

Air Resources Board Staff Comments on San Diego County Air Pollution Control District Draft Rule 61.2

Rule 61.2 Transfer of Organic Compounds Into Mobile Transport Tanks

- 1. Subsections (b)(2) and (b)(4): These sections exempt from vapor recovery the loading of nonvolatile organic compounds to mobile transport tanks containing volatile organic compounds (VOC) or VOC vapors if the facility's annual throughputs of gasoline and diesel fuels do not exceed 5.000,000 gallons. The throughput level of 5,000,000 gallons per year, up to which the rule allows exemption from vapor control, is a factor of 10 or more times higher than the levels provided in the rules of other California air pollution control districts. The ARB staff estimates that up to five tons per year of VOC reduction per facility could be achieved by requiring vapor recovery piping on the exempt storage tanks.
- 2. Section (c): The standards should include language that states that all gasoline vapor recovery control systems shall be certified by the California Air Resources Board, in accordance with Health and Safety Code section 41954.



Air Pollution Control Board

Greg Cox District 1
Dianne Jacob District 2
Pam Slater District 3
Ron Roberts District 4
Bill Horn District 5

Air Pollution Control District

R. J. Sommerville Director

April 18, 2000

TO:

Workshop Participants and Other Interested Parties

FROM:

Richard J. Smith Assistant Director

RULE 61.2 - TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

Proposed amended Rule 61.2 was presented at a public workshop on May 27, 1999. It included an exemption for a specific U.S. Military gasoline transfer operation and provided updates and clarifications. On September 30, 1999, the District received comments from the California Air Resources Board (ARB). In response to these comments, the District proposed further amendments and mailed them to workshop participants and other interested parties on November 15, 1999.

The amendments proposed adding a requirement that all Phase I vapor recovery systems be ARB certified, and deleting the Subsection (b)(2) exemption for facilities with a throughput of <5,000,000 gallons per year of volatile organic compound (VOC) or diesel, and installed prior to March 1, 1984. At that time, the District was unaware of any sources using this exemption and deleting it was the simplest way to address ARB's comments.

Subsequently, some small facilities notified the District they are still operating under the Subsection (b)(2) exemption. The District has now determined the only option that is cost-effective and technically feasible is to lower the exemption throughput limit from 5,000,000 to 500,000 gallons of gasoline per year. Lowering the exemption limit will not impact any facilities, since all facilities operating under the exemption have a gasoline throughput of less than 500,000 gallons per year. Facilities currently exempted under Subsection (b)(2) would be required to control switch loading activities by 90% if they exceed the 500,000-gallon annual gasoline throughput limit. The proposed revision satisfies the state requirement to implement all feasible measures.

A copy of the final proposed draft of amended Rule 61.2 is attached for your review. The final proposed draft reflects all changes made to the existing rule. Changes made to Rule 61.2 after the workshop are double underlined, double strikethrough. The District has tentatively scheduled adoption of this rule for July 26, 2000.

If you have any questions or comments regarding these proposed rule changes please contact Angela Durr at (858) 694-3413 or Laura Yannayon at (858) 694-3326 by May 9, 2000.

RICHARD J. SMITH

Assistant Director

Attachment

RJSm:LY:ls

AIR POLLUTION CONTROL DISTRICT SAN DIEGO COUNTY

AMENDED RULE 61.2 - TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

WORKSHOP REPORT

A workshop notice was mailed to all companies and government agencies in San Diego County that may be subject to the proposed amended Rule 61.2 - Transfer of Organic Compounds into Mobile Transport Tanks. Notices were also mailed to all Economic Development Corporations and Chambers of Commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

The workshop was held on May 27, 1999, and was attended by three people. Written comments were also submitted. The comments and District responses are provided below.

WORKSHOP COMMENT

Subsection (c)(10) specifying test methods has been deleted and Section (d) added to include the new test methods. Will this result in any new additional testing requirements? What will be the impact of this revision on the facilities subject to Rule 61.2?

DISTRICT RESPONSE

There will be no additional testing requirements for the sources subject to Rule 61.2. Subsection (c)(10) in the current rule included test methods that have since been replaced. New Section (d) specifies the latest test methods that are currently being used by the District and ARB. This revision will not have any impact on affected facilities.

2. WORKSHOP COMMENT

Which test methods would apply to the operation of a transfer loading arm?

DISTRICT RESPONSE

The transfer loading arm would be subject to the fugitive liquid leak and liquid spillage standards of Section (c)(3) and should be inspected using either EPA Method 21 "Determination of Volatile Organic Leaks" or ARB Test Method TP-204.3 "Determination of Leak(s)."

3. WORKSHOP COMMENT

What test methods apply to the mobile transport tanks and who should perform these tests?

DISTRICT RESPONSE

Mobile transport tanks are certified and tested annually using ARB "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." The owner of the mobile transport tank is responsible for the testing of the tanks. The testing results must be sent to ARB to receive the certification sticker.

4. WRITTEN COMMENT

Subsection (b)(6) exempts transfers of volatile organic compound (VOC) liquid from or to United States military ships up to 6,500 gallons per year at any single location. The exemption limit of 6,500 gallons per year should be increased to 21,000 gallons per year to allow for contingencies in increased military naval activity.

DISTRICT RESPONSE

The District agrees. Subsection (b)(6) has been revised to specify that under this exemption, the annual throughput for VOC liquid transfer within San Diego County must not exceed 21,000 gallons. Subsection (b)(6) also specifies that the sources subject to this exemption will have to comply with the fugitive liquid leaks and liquid spillage standards of Sections (c)(3), (c)(7), and (c)(10) of the rule.

5. **EPA COMMENT**

Subsection (b)(6) exempts transfers of VOC liquid from or to United States military ships up to 6,500 gallons per year at any single location. The State Implementation Plan (SIP) version of Rule 61.2 does not allow such exemption. The District should either delete this proposed exemption or demonstrate that its addition is not a relaxation prohibited by Sections 110(l) and 193 of the Federal Clean Air Act (FCAA).

DISTRICT RESPONSE

VOC emissions associated with operations subject to the new exemption in Subsection (b)(6) are negligible. The calculations using both EPA AP-42 emission factors and the emission factors from the source test conducted by the District under actual operating conditions show that the transfer of 6,500 gallons of unleaded gasoline will result in 55 lbs per year of VOC emissions. The transfer of 21,000 gallons of gasoline from the Navy ships which will be allowed by the revised Subsection (b)(6) will produce, at maximum, 179 lbs per year. This represents 0.03% of total allowable VOC emissions from all gasoline transfer operations subject to Rule 61.2.

This increase in VOC emissions is insignificant and will not interfere with the District's attainment demonstration and reasonable further progress for attaining the National Ambient Air Quality Standard for ozone as required by Section 110(l) of the FCAA.

The amount of VOC emission increase as a result of the exemption in Subsection (b)(6) is not a relaxation prohibited by Section 193 of the FCAA. Since 1990, the District adopted a number of rules that reduced VOC emissions in San Diego County by more than 1,500 tons per year. These emission reductions will definitely offset the 179 lbs per year of VOC emission increase resulting from the exemption of the Navy operations from the add on emission control requirements of Rule 61.2. This will satisfy the requirements of Section 193 of the FCAA.

6. EPA COMMENT

The test methods specified in Section (d) must be approved by EPA. Section (d)(1) specifies ARB Test Method TP-204, which has not yet been approved by EPA. Pending approval, EPA Method 27 should be added to Section (d)(1).

DISTRICT RESPONSE

EPA Region IX notified the District that ARB Test Method TP-204 will be approved in the near future. Rule 61.2 has been revised to include language that requires EPA approval of TP-204 prior to using the test method.

ADDITIONAL ISSUES ADDRESSED DUE TO SUBSEQUENT AIR RESOURCES BOARD COMMENTS

At the time of the workshop, Air Resources Board (ARB) had no comments on the rule amendments. On September 30, 1999, the District received comments from ARB on revised draft Rule 62.1, dated June 30, 1999. ARB identified rule improvements necessary to satisfy the requirement that the District adopt all feasible measures in accordance with Health & Safety Code Section 40914.

The ARB comments and District responses are provided below.

1. ARB COMMENT

The exemption throughput limit of 5,000,000 gallons per year in Subsection (b)(2) should be reduced to require more facilities to install vapor recovery piping.

DISTRICT RESPONSE

The District agrees and has lowered the exemption throughput limit of Subsection (b)(2) from 5,000,000 to 500,000 gallons of gasoline per year.

2. ARB COMMENT

The exemption throughput limit of 5,000,000 gallons per year of Subsection (b)(4) should be reduced to require more facilities to install vapor recovery piping.

DISTRICT RESPONSE

The District disagrees. Subsection (b)(4) only exempts specified facilities from complying with the more stringent emission rate, not from installing vapor recovery piping.

3. ARB COMMENT

Section (c) should include language to require all gasoline vapor recovery control systems be ARB certified.

DISTRICT RESPONSE

The District agrees and has added language to Section (c) to require all gasoline vapor recovery control systems be ARB certified.

6/15/00 AD:ls

SAN DIEGO AIR POLLUTION CONTROL DISTRICT

PROPOSED AMENDED RULE 61.2

Proposed amended Rule 61.2 to read as follows:

RULE 61.2. TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE TRANSPORT TANKS

(a) **APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to the transfer of any volatile organic compound (VOC) into a mobile transport tank with a capacity of 550 gallons (2,082 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 550 gallons (2,082 liters) or greater where the transfer involves the displacement or results in the generation of VOC vapors of volatile organic compounds.

(b) **EXEMPTIONS**

- (1) Transfer into any mobile transport tank from any stationary tank specified in Rule 11(e) shall not be subject to the provisions of Section (c) 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 either 5,000,000 500,000 gallons (1,892,700 18,927,300 18,925 kiloliters) per year of VOC. volatile organic compounds or 5,000,000 gallons (18,927,300 18,925 kiloliters) per year of diesel fuel. 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. Two full years of records do not have to be made available until September 1, 1992.
- (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 <u>VOC</u> throughput of volatile organic compounds does not exceed 5,000,000 gallons (18,927,000) 18,927,300 18,925 kiloliters) 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. Two full years of records do not have to be made available until September 1, 1992.

- (5) The provisions of Subsection (c) (10) (11) shall not apply to any bulk plant or bulk terminal owned by any branch of the United States Armed Forces.
- States Navy ship used primarily for purposes of maintenance for other ships provided that the total annual throughput for such transfers occurring at a stationary source does not exceed 6,500 gallons (24,605 liters) per year at any single location. 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.

(7)(6) 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 <u>VOC</u> volatile organic compounds from any stationary storage tank into any mobile transport tank, each with a capacity of more than 550 gallons (2,082 2,080 liters), unless 90 percent 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 <u>VOC</u> volatile organic compounds 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 <u>VOC</u> volatile organic compounds 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 2,080 liters) which was transporting <u>VOC</u> volatile organic compounds or <u>VOC</u> vapor of volatile organic compounds prior to said transfer unless at least 90 percent 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) After December 31, 1984, n 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 volatile organic compound unless at least 90 percent 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 2,080 liters) if the transfer displaces <u>VOC</u> volatile organic compounds, 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 <u>VOC</u> volatile organic compound vapor-air mixtures, and
 - (ii) The pressure does not exceed 18 inches of water gauge and the vacuum does not exceed $6 \underline{\text{six}}$ 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 and
 - (iii) A loading rack which is not compatible with the dual automatic shutoff and shall prevent transfer into transport tanks relying on a A float switch type liquid level sensor overfill prevention system, if a loading rack is not compatible with (ii) above. ; or

In lieu of (i), (ii), and (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) and/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.

Loading racks that are not required to have the above overfill prevention system as a condition of an Authority to Construct or Permit to Operate existing on July 1, 1988, shall be equipped with the above system on or before April 1, 1989.

- (9) No person shall transfer or allow the transfer of <u>VOC</u> volatile organic compounds from any mobile transport tank into any other mobile transport tank, each with a capacity of more than 550 gallons (2,082 2,080 liters), unless
 - (i) 90 percent 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 by weight of the hydrocarbon vapors generated by daily cycles of heating and cooling in the mobile transport tank from which the <u>VOC</u> volatile organic compounds are transferred are prevented from being released to the atmosphere. This emission limit applies only when the mobile transport is stationary.

- (10) Testing used to demonstrate compliance with the requirements of this rule shall be done in accordance with the following test methods: (Rev. Effective 10/16/90)
 - (i) Transport tanks shall be tested using State of California Air Resources
 Board (ARB) Method 2-5 "Certification and Test Procedures for Vapor Recovery
 Systems of Gasoline Delivery Tanks" or ARB Executive Order G-70-106 "Test
 Procedure Gasoline Cargo Tanks". The test procedures used shall be those in effect
 on October 16, 1990.
 - (ii) Vapor control systems at bulk plants and bulk terminal shall be tested using the applicable test methods that are specified in the State of California Air Resources Board (ARB) "Stationary Source Test Methods-Volume 2", as it exists on October 16, 1990, for determining exhaust emissions; and in the District's Manual of Procedures, as it exists on October 16, 1990, for determining aspects of compliance not addressed in ARB's "Stationary Source Test Methods-Volume 2". An applicable test method is one that is specifically designed for the type of system to be tested. Equivalent U.S. Environmental Protection Agency (EPA) test methods, as determined by the Air Pollution Control Officer and EPA, may be used to determine exhaust emissions. All test methods and procedures used to determine compliance are required to have written approval from the Air Pollution Control Officer prior to their use.
- (10)(11) No person shall transfer or allow the transfer of <u>VOC</u> volatile organic eompounds into any mobile transport tank unless the liquid transferred enters within six inches of the bottom of the mobile transport tank or compartment.
- (11)(12) 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 (ARB), pursuant to Section 41954 of the Health and Safety Code.

(d) TEST METHODS

Testing shall be performed used to demonstrate compliance with the requirements of this rule shall be done in accordance with the following test methods:

(1) Mobile transport tanks shall be <u>certified and</u> tested annually using-<u>either State</u> of California Air Resources Board (ARB) Executive Order G-70-106 "Test Procedure

Gasoline Cargo Tanks," "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 they exist on (date of adoption).approved by Environmental Protection Agency (EPA).

(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 (*date of adoption*).

<u>Test procedures shall be performed in accordance with a protocol approved in writing by the Air Pollution Control Officer.</u>

- (3) Fugitive leaks shall be tested using either Environmental Protection Agency EPA Hethod 21 "Determination of Volatile Organic Leaks" or ARB Test Method TP-204.3 "Determination of Leak(s)," as they exist on (date of adoption).
- (4) Any other EPA and ARB approved test procedure for determining the performance of systems used to control VOC emissions from the transfer of organic compounds into mobile transport tanks.

<u>Test procedures shall be performed in accordance with a protocol approved in writing by the Air Pollution Control Officer.</u>

STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD



FAX TRANSMISSION

P. O. Box 2815 Sacramento, California 95812 FAX: (916) 327-5621

Date: June 6, 2000 Pages to follow: 1

For Transmission Problems: Marilyn Jackson, (916) 322-2289

Rule Review Comments

Please Deliver As Soon as Possible To:

Ms. Laura Yannayon San Diego County Air Pollution Control District Telephone Number: (858) 694-3326

FAX Number: (858) 694-2730

From: Jim Sane, (916) 327-1509

This letter replaces our May 31, 2000 letter regarding the following draft rule, which was received by us on April 18, 2000, for our review. Our May 31, 2000 letter is hereby withdrawn.

Rule 61.2 Transport of Organic Compounds into Mobile Transport Tanks

We have reviewed the rule and have the comment on the following page.

Mr. James Loop of our Testing Section, Engineering and Laboratory Branch, Monitoring and Laboratory Division, discussed our comment with you on May 22, 2000. Based on further conversations, we understand that the test method referred to in our comment is referenced in Section (d)(4) of the rule, and for clarity, could be added to Section (d)(1).

If you have any questions about our comment, please contact Ms. Cindy Castronovo, Manager of the Testing Section at (916) 322-8957.

From: SSD To: Laura Yannayon

Date: June 6, 2000

Air Resources Board Staff Comments on South Diego County Air Pollution Control District Draft Rule 61.2

Rule 61.2 Transfer of Organic Compounds into Mobile Transport Tanks

1. <u>Section (d)(1)</u>: For clarification we recommend that the following sentence be added at the beginning of this section: <u>Both annual testing and ongoing testing</u> shall include the application of ARB TP-204.3, <u>Determination of Leaks</u>.

2

bbc: Andy Steckel, U.S. EPA

Carl Brown/Simeon Okoroike, CD

George Lew/Cindy Castronovo/James Loop, MLD

Steve Brisby, SSD Jim Sane, SSD Rules File 1000.10

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