



Ramine Ross

Senior Manager, Regulatory Affairs
Southern California Region

April 10, 2024

Michael Morris
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Via e-mail at: mmorris@aqmd.gov

Re: SCAQMD Proposed Amended Rule 463, Organic Liquid Storage – WSPA Comments on Preliminary Draft Rule Language

Dear Mr. Morris,

Western States Petroleum Association (WSPA) appreciates the opportunity to participate in the Working Group Meetings (WGMs) for South Coast Air Quality Management District (SCAQMD or District) Proposed Amended Rule 463, Organic Liquid Storage (PAR 463). WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport, and market petroleum, petroleum products, natural gas, renewable fuels, and other energy supplies in five western states including California. WSPA has been an active participant in air quality planning issues for over 30 years. WSPA-member companies operate petroleum refineries and other facilities in the South Coast Air Basin that will be impacted by PAR 463.

SCAQMD released initial preliminary draft rule language for PAR 463 on March 22, 2024.¹ WSPA offers the following comments on the draft rule language.

- 1. PAR 463(d)(3)(C) would require a control efficiency of 98% for Fixed Roof Tanks, despite these tanks holding permits based on a 95% control efficiency. The proposed language in this section should revert back to the current language and maintain the requirement at 95%.**

The District has proposed that Fixed Roof Tank emissions be vented to a Fuel Gas System or an Emissions Control System with an overall control efficiency of 98%. The control efficiency in the current rule is 95%. In the PAR 463 Preliminary Draft Staff Report (PDSR), SCAQMD references the recent rulemaking for Rule 1178, noting that 98% efficiency is achievable based on performance test results for combustion and carbon adsorption systems.² The report also suggests that SCAQMD is assuming no costs would be needed to meet a 98% control efficiency.³ The PAR 1178 staff report notes that the most common type of vapor recovery system used on fixed roof tanks are combustion systems, with one supplier guaranteeing 98% control efficiency on such systems.⁴ Adsorption systems have higher

¹ Proposed Amended Rule 463, Organic Liquid Storage: Initial Preliminary Draft Rule Language. Available at:

<https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/rule-463/par-463-preliminary-draft-rule-language.pdf?sfvrsn=6>

² SCAQMD PAR 463 Preliminary Draft Staff Report. Available at: <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/rule-463/par-463-pdsr.pdf?sfvrsn=6>.

³ Ibid.

⁴ SCAQMD PAR 1178 Staff Report. Available at: <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1178/par-1178-draft-staff-report--final.pdf?sfvrsn=10>.

capital costs and are less desirable for tanks, and the same supplier guaranteed 95% control efficiency for such systems.⁵

During the PAR 1178 rulemaking, the District reported having reviewed four initial performance tests, which all showed greater than 99% control efficiency.⁶ The District has not defined the number of vapor recovery systems in the regulated community, nor have they presented any evidence to demonstrate that these four tests are representative for all affected equipment. Furthermore, the District has not yet provided information to demonstrate that all existing operating emission control systems affected by the rule would meet the proposed control efficiency.⁷ It is important that this information be provided to stakeholders prior to rule adoption.

Current permits are issued based on a 95% control efficiency. If the District intends to require a higher control efficiency standard, it must provide evidence to support the assertion that all existing fixed roof tanks with vapor recovery systems can meet this standard without modifications. If the District is not able to provide such technical evidence, the proposal would require a complete BARCT analysis, including evaluation of technical feasibility and potential compliance costs.

Additionally, WSPA would like to understand the basis for claiming 0.005 tons per day of VOC emission reductions from this proposed change.⁸ If, as asserted in the PDSR, all existing emission control systems already meet the proposed control efficiency, then there would be no creditable reductions available.

WSPA recommends that the language revert back to the current rule language:

The vapor recovery system shall have an efficiency of at least 95 percent by weight, or vent Tank emissions to a Fuel Gas System.

- 2. In estimating the cost-effectiveness for doming of external floating roof tanks, the District has provided an incomplete analysis of potential cost and potential emission reductions. WSPA recommends that SCAQMD revisit the cost-effectiveness analysis to account for all potential costs, and updates emission reduction estimates.**

The California Health & Safety Code requires the District, in adopting any Best Available Retrofit Control Technology (BARCT) standard, to ensure the standard is technologically feasible, to take into account “environmental, energy, and economic impacts” and to assess the cost-effectiveness of the proposed control options.⁹ Cost-effectiveness is defined as the cost, in dollars, of the control alternative, divided by the emission reduction benefits, in tons, of the control alternative.¹⁰ If the cost per ton of emissions reduced is less than the established cost-effectiveness threshold, then the control method is considered to be cost-effective. Cost-effectiveness evaluations need to consider both capital costs (e.g., equipment procurement, shipping, engineering, construction, and installation) and operating (including expenditures

⁵ Ibid.

⁶ Ibid.

⁷ SCAQMD PAR 463 Working Group Meeting #2 Presentation. Available at: <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/rule-463/par-463-wgm2.pdf?sfvrsn=12>.

⁸ PAR 463 Public Workshop. Available at: <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/rule-463/par-463-public-workshop.pdf?sfvrsn=10>.

⁹ California Health & Safety Code §40406, 40440, 40920.6.

¹⁰ California Health & Safety Code §40920.6.

associated with utilities, labor, and replacement) costs. Currently, the District is applying a cost-effectiveness threshold of \$36,000 per ton of VOC emissions reduced, consistent with the 2022 Air Quality Management Plan (2022 AQMP).¹¹

In estimating costs for doming of external floating roof tanks, the District has not provided a complete picture of the potential costs or potential emission reductions. The District cost estimates include capital, installation, and operating costs for the dome. However, in doming tanks, there are multiple other costs that may be required depending on the current configuration of the tank. For example, rolling ladders would need to be replaced with vertical ladders. Replacement of rolling ladders is necessary due to the risk of catastrophic damage that would result from a ladder crashing into the dome. Additionally, gauge hatches would need to be replaced with slotted gauge poles for product quality testing. Finally, the cost estimates have not been adjusted to reflect cost at the time of doming, which could be as much as 23 years after the date of rule adoption.

SCAQMD has also overestimated the potential emission reductions resulting from the proposed installation of the domes. For example, slotted gauge poles would result in higher emissions from the tanks, partially negating some of the claimed emission reductions. In addition, The Advanced Clean Cars II Regulation is designed to reach 100% new vehicle zero emission vehicles and clean plug-in hybrid electric vehicles in California by the 2035 model year. This planned phase-out of gasoline powered vehicles is expected to cause a significant reduction in California gasoline consumption. The proposed 50-year useful life of the dome is therefore overestimated given California's other regulatory mandates.

WSPA recommends that the District revisit the cost-effectiveness analysis to include all costs associated with doming, update the estimate of emission reductions, and reconsider the useful life of the equipment.

- 3. PAR 463(d)(1)(I) would require facilities to demonstrate the true vapor pressure (TVP) of organic liquid in an External Floating Roof Tank (EFRT) using an initial test effective January 1, 2025. EFRTs storing organic liquids with TVP below 3 psia would be required to conduct subsequent tests at least once every six calendar months. PAR 463(g)(6) would require results of TVP monitoring greater than 3.0 psia to be reported to the District within one week of measurement. This is a very short time frame that would cause undue burden to facilities. Additionally, the rule should include a provision that allows for a monthly average of TVP measurements to be reported instead of individual measurements when this threshold is exceeded.**

PAR 463(d)(1)(I) states:

Effective January 1, 2025, an owner or operator of an External Floating Roof Tank shall demonstrate the True Vapor Pressure of the Organic Liquid using an initial test, with one representative sample. External Floating Roof Tanks storing Organic Liquids with True Vapor Pressure below 3 psia shall conduct subsequent tests at least once every six calendar months pursuant to the requirements of subdivision (i).

¹¹ SCAQMD Draft Final 2022 Air Quality Management Plan. Available at: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>.

PAR 463(g)(6) states:

An owner or operator shall report any tests specified in subparagraph (d)(1)(I) that result in a True Vapor Pressure of 3.0 psia or greater to the Executive Officer within one week.

WSPA requests that the language be updated to allow facilities two weeks (14 days) to provide notification to the District when TVP is measured above 3.0 psia.

WSPA requests that the District include a provision that allows for monthly averaging of TVP measurements, similar to allowances provided in Rule 1178. This would give facilities the opportunity to resample the tank or adjust the stock blend as needed to bring the TVP under 3.0 psia. WSPA recommends the language be updated as follows:

PAR 463(d)(1)(I):

Effective January 1, 2025, an owner or operator of an External Floating Roof Tank shall demonstrate the True Vapor Pressure of the Organic Liquid ~~using an initial test, with one representative sample based on a monthly average of sample results.~~ External Floating Roof Tanks storing Organic Liquids with True Vapor Pressure below 3 psia shall conduct subsequent tests ~~to determine the monthly average true vapor pressure~~ at least once every six calendar months pursuant to the requirements of subdivision (i).

PAR 463(g)(6):

An owner or operator shall report any tests specified in subparagraph (d)(1)(I) that result in a True Vapor Pressure of 3.0 psia or greater ~~based on a monthly average~~ to the Executive Officer within ~~one week~~ fourteen days.

- 4. PAR 463(d)(2)(d) would require a facility to comply with seal requirements for Internal Floating Roof Tanks when the tanks are scheduled for emptying and degassing, but no later than 10 years after becoming subject to the requirements of the rule. SCAQMD should include the cost of forcing an early turnaround on tanks in the cost-effectiveness analysis. If that analysis is not complete, WSPA recommends that the 10-year installation requirement be removed from the rule.**

PAR 463(d)(2)(D) would require a facility to comply with the Primary and Secondary Seal requirements for Internal Floating Roof Tanks (IFRTs) when the tanks are scheduled for emptying and degassing and install Secondary Seals no later than 10 years after becoming subject to the requirements of the rule. This could force an early turnaround of a tank before it's next required API inspection, adding to the cost of compliance. To our knowledge, SCAQMD has not evaluated the impact of such compliance schedule requirements, nor the associated costs to determine whether such a requirement would be cost-effective. WSPA recommends the proposed language be updated as follows:

Beginning two years after [Date of Adoption], the owner or operator shall comply with the Primary and Secondary Seal requirements for Internal Floating Roof Tanks specified in subparagraph (d)(2)(A) when the Tanks are scheduled for emptying and degassing. ~~The owner or operator shall install Secondary Seals no later than ten years after [Date of Adoption].~~

5. PAR 463(h)(3) exempts storage tanks that are subject to Rule 1178, with exceptions for subdivision (e) and paragraph (c)(42). WSPA recommends that 463(c)(34) should be included among these exceptions.

PAR 463(h)(3) includes the following exemption:

The provisions of this rule shall not apply to Storage Tanks that are subject to Rule 1178, except for subdivision (e) and paragraph (c)(42).

WSPA suggests that a reference to paragraph (c)(34) be added to the exception list as well. WSPA recommends that the language be updated as follows:

*The provisions of this rule shall not apply to Storage Tanks that are subject to Rule 1178, except for subdivision (e), **paragraph (c)(34)**, and paragraph (c)(42).*

WSPA appreciates the opportunity to provide these comments related to PAR 463. We look forward to continued discussion of this important rulemaking. If you have any questions, please contact me at (310) 808-2146 or via e-mail at ross@wspa.org.

Sincerely,



Cc: Wayne Nastri, SCAQMD
Sarah Rees, SCAQMD
Michael Krause, SCAQMD
Isabelle Shine, SCAQMD
Joshua Ewell, SCAQMD
Patty Senecal, WSPA