

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

FINAL DRAFT STAFF REPORT

Proposed Amendments to Rule 4702 (Internal Combustion Engines)

October 15, 2013

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After a thorough evaluation and an extensive public process the San Joaquin Valley Unified Air Pollution Control District (District) amended Rule 4702 (Internal Combustion Engines) in 2011. This adoption satisfied commitments in the both District's *2007 Ozone Plan* and *2008 PM2.5 Plan*. Since adoption of these amendments, and upon further review, it has been determined that some clarification is necessary to more clearly align rule language with the intent of the 2011 rule amendments.

The four-year rule amendment process for the 2011 amendments included a feasibility study; research of the District's permits database, industry standards, technological advancements and actions taken by other regulatory agencies; and evaluation of public comments received throughout the public process including four public workshops, several stakeholder technical discussion meetings and socioeconomic focus group meetings. These extensive efforts resulted in the adoption of numerous technologically feasible and cost effective new and more stringent rule requirements. Through this process, the District made the determination that reducing the NOx emission limits for waste gas fueled internal combustion engines is not feasible, and therefore proposed no amendments to the NOx emission limits for these engines.

The purpose of this current rule amending project is to make administrative updates to rule language to clarify existing rule requirements by deleting "stationary" from Section 5.2, deleting "the" from Section 5.10.2, adding "and" to Section 7.5.2.1, adding "source" to Section 7.6.2.2, and by adding a line item to Table 2 to clarify that NOx limits for lean-burn waste gas fired engines used exclusively in non-Agricultural Operations (Non-AO) is 65 parts per million by volume (ppmv). This rule amending project would not change existing emissions limits or affect air quality.

DRAFT AMENDMENTS TO RULE 4702

The proposed administrative rule clarifications are as follows.

Applicability

During the rule amendment project for the 2011 amendments, the word “stationary” was added to Section 5.2, as this section is applicable to all engines rated at greater than 50 brake horsepower (bhp) that are operated as a part of a stationary source. However, the addition of the term stationary could be misinterpreted by stakeholders to mean that requirements in Section 5.2 are limited to stationary engines. Additionally, we believe this word was carried over from Section 5.1, which is intended to provide an inventory of small stationary engines, and so the word “stationary” is less likely to be misinterpreted there. Current amendments would remove the word “stationary” from Section 5.2 to ensure the intent of the language is not misinterpreted. This clarification does not result in a change to currently enforced rule requirements or applicability.

NO_x Limits for Lean-Burn Waste Gas Fired Engines

Section 5.2.2 Table 2 would be amended to clarify the NO_x limit for waste-gas fueled lean burn engines used exclusively in Non-AO. The addition of this line item would clarify the existing 65 ppmv limit for these engines, originally presented in Table 1 line item 2.b of the 2007 version of the rule.

During the 2011 rule amendment project, the District determined that further reducing the NO_x emission limits for waste gas fueled internal combustion engines goes beyond RACT due to significant technical difficulties and prohibitive costs associated with the inherent heat content variability of waste gas. It was therefore decided that no amendments would be proposed to reduce the NO_x emission limits for these engines. This decision is explained in several instances throughout the Governing Board Memo, CEQA Initial Study, and Final Draft Staff Report with Appendices¹, and the presentation² at the public hearing for adoption of proposed amendments:

- Governing Board Memo, pages three, eight and nine
- The CEQA Initial Study and Final Negative Declaration for Proposed Amendments to Rule 4702, page eight
- Final Draft Staff Report, pages three and ten
- Appendix B (Emission Reduction Analysis), page B-6
- Appendix C (Cost Effectiveness Analysis), pages C-4 and C-5
- Appendix D (Socioeconomic Analysis), page D-7
- Presentation to the Governing Board, slides four and seven

¹ August 18, 2011 Memo to SJVUAPCD Governing Board (2011). Retrieved September 25, 2013 from http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2011/August/Agenda_Item_10_Aug_18_2011.pdf

² August 18, 2011 Presentation to SJVUAPCD Governing Board (2011). Retrieved September 25, 2013 from http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2011/August/R4702PresentationGB.pdf

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The proposed line-item clarification for lean-burn waste gas fired engines used exclusively in Non-AO would be added to Table 2 of Rule 4702; see below.

Updated Table 2 for Rule 4702 Emission Limits for Internal Combustion Engines

Table 2 Emission Limits for a Spark-Ignited Internal Combustion Engine Rated at >50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected to 15% oxygen on a dry basis). Emission Limits are effective according to the compliance schedule specified in Section 7.5.			
Engine Type	NOx Limit (ppmv)	CO Limit (ppmv)	VOC Limit (ppmv)
1. Rich-Burn			
a. Waste Gas Fueled	50	2000	250
b. Cyclic Loaded, Field Gas Fueled	50	2000	250
c. Limited Use	25	2000	250
d. Rich-Burn Engine, not listed above	11	2000	250
2. Lean-Burn Engines			
a. Two-Stroke, Gaseous Fueled, >50 bhp and < 100 bhp	75	2000	750
b. Limited Use	65	2000	750
c. Lean-Burn Engine used for gas compression	65 ppmv or 93% reduction	2000	750
<u>d. Lean-Burn Engine, Waste Gas Fueled</u>	<u>65 ppmv or 90% reduction</u>	<u>2000</u>	<u>750</u>
<u>ed.</u> Lean-Burn Engine, not listed above	11	2000	750

ANALYSES

This rule amending project is an administrative clarification of existing rule requirements; proposed amendments do not result in new or more stringent regulatory controls and do not affect air quality or emission limitations. No emission reductions or costs are associated with this rule-amendment project. Therefore, this rule amending project does not require a socioeconomic impact analysis (CH&SC § 40728.5(a)), a rule consistency analysis (CH&SC § 40727.2), or a CEQA analysis (CEQA guidelines § 5378(a)).

RULE DEVELOPMENT PROCESS

The District will make the Proposed Amendments to Rule 4702 and the Final Draft Staff Report available for review and public comment 30 days prior to a public hearing of the Governing Board to consider adoption of the proposed rule amendments. The District will evaluate comments received and incorporate them as appropriate. The proposed amendments will be presented to the Governing Board for adoption at a public hearing on November 14, 2013.

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Final Draft Staff Report: Rule 4702

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