Compliance Assistance Bulletin



District Rule 4702 Requirements for Spark-Ignited Rich Burn Internal Combustion Engines used in Agricultural Operations

September 27, 2023

The San Joaquin Valley Air Pollution Control District (District) amended District Rule 4702 on August 19, 2021 for the purpose of reducing nitrogen oxide (NOx), carbon monoxide (CO), and volatile organic compound (VOC) emissions from spark-ignited internal combustion (IC) engines. The amendment included a requirement for agricultural engine operators of spark-ignited rich burn IC engines to submit either an *Application for Authority to Construct and Inspection Maintenance Plan*, *Permit Exempt Equipment Registration Supplemental Application*, or an *Emission Control Plan* to the District, and to demonstrate compliance with new emissions limits by the end of 2023.

How to Comply with Rule 4702

To comply with the requirements of Rule 4702, owners/operators must submit either an Authority to Construct (ATC) permit application, a Permit-Exempt Equipment Respiration (PEER) Application, or an Emission Control Plan (ECP) to the District. The application or plan should identify the chosen method of compliance. Possible methods to demonstrate compliance include:

- 1) Replace engine with an electric motor (this compliance method does not require an ATC or PEER application)
- 2) Retrofit or replace engine with a compliant catalyst system (exhaust control device)
- 3) Retrofit or replace engine to operate in a compliant lean-burn configuration
- 4) Perform a source test on your currently installed engine(s), showing compliance with the emission limits in the table below (The District must be notified 30 days prior to any compliance source testing, and a source test plan must be submit to the District for approval 15 days prior to the test date)

Deadlines for Submitting Applications or ECPs

Permitted engines required an ATC application or ECP by August 1, 2022

Applications for Permitted Engines:

Authority to Construct / Permit to Operate Application Form:

 $\underline{https://ww2.valleyair.org/media/pfvpdv31/authority-to-constructpermit-to-operate-application.pdf}$

Supplemental Application Form / Emission Control Plan:

https://www.valleyair.org/busind/pto/ptoforms/R4702-Compliance-Application-Form-for-Ag-SI-Engine.pdf

Applications for PEER Engines:

General Application:

https://www.valleyair.org/busind/pto/PEER/Documents/PEER-Application-General.pdf

Supplemental Application Form / Emission Control Plan:

https://www.valleyair.org/busind/pto/PEER/Documents/Rule4702Form%E2%80%93SparkIgnitedAgEnginesSupplementalApplicationandEmissionControlPlan.pdf

Timeline to Demonstrate Compliance with Emission Limits (all corrected to 15% oxygen on a dry basis)

Existing Agricultural IC	Emissi	Emission Limits		Demonstrate Compliance By
Engine Category	NOx	CO	VOC	Demonstrate Compliance by
Spark-Ignited, Rich Burn	0.15 g/bhp-hr	2000	90	12/31/23
	or 11 ppmv	ppmv	ppmv	

Testing/Monitoring Requirements (only if equipped with an Exhaust Control Device*)

- 1) Source test once every 24 months,
- 2) Monitor emissions with a portable analyzer once every 24 months, and
- 3) Operator performs monthly inspections of equipment.

Permit or PEER?

The need for a permit or a PEER is determine by the total emissions from each farm. Farms with NOx or VOC emissions over 5 tons/year must obtain an ATC for each engine. Farms with lower emissions must obtain a PEER for each engine. For help determining if your engines will require a permit or a PEER and how to proceed, please call one of the District's **Small Business Assistance** hotlines below.

Where Can I Get Help?

Please call one of the District's Small Business Assistance hotlines for assistance:

Bakersfield Office: 661-392-5665 Modesto Office: 209-557-6446 Fresno Office: 559-230-5888

Related Internet Links

Full Rule 4702 text:

https://www.vallevair.org/rules/currntrules/r4702.pdf

Public Workshop Presentation (June 2021):

https://ww2.vallevair.org/media/yqmkomd0/final_6_25-draft-r4702-workshop-20210628.pdf

Compliance Assistance Bulletin (September 2021):

https://ww2.valleyair.org/media/zyxny33l/r4702-cab-9-13-21.pdf

Compliance Assistance Bulletin (December 2022):

https://ww2.valleyair.org/media/cnnd3nym/rule-4702-emission-standards-for-agricultural-operators.pdf

^{*}Source testing and monitoring are not necessary if a District Certified exhaust control system is installed on the engine. For information on District Certification under rule 4702, please call one of the District's **Small Business Assistance** hotlines below.