



COMPLIANCE ASSISTANCE BULLETIN

April 2008

District Rule 4702 Requirements for Spark-Ignited Internal Combustion Engines Used in Agricultural Operations

Spark-ignited agricultural IC engines rated at greater than 50 brake horsepower (bhp) are subject to District Rule 4702. This includes stationary and transportable irrigation pump engines, dairy digester gas-fired engines, and other engines used in agricultural operations that are fired on natural gas, propane/LPG, biogas, and/or gasoline. Spark-ignited IC engines are subject to Rule 4702 requirements detailed below. Please note that failure to abide by these requirements will result in enforcement action.

Rule 4702 Full Compliance Date

Full compliance with Rule 4702, including source testing (if applicable), is required by January 1, 2009.

How to Comply with Rule 4702?

To comply with the requirements of Rule 4702, owners/operators shall submit either an Authority to Construct (ATC) permit application or a Permit-Exempt Equipment Registration (PEER) application by the *upcoming deadline* specified below. The application should identify the chosen compliance method. Possible compliance methods include:

- 1) Replace engine with an electric motor (this compliance method does not require an ATC or PEER application, and extends your compliance date to January 1, 2010 if you enter into an agreement to electrify with the District),
- 2) Retrofit or replace engine with a compliant catalyst system (exhaust control device),
- 3) Replace or retrofit engine to operate in a compliant lean-burn configuration, or
- 4) Replace engine with a new latest-tier certified diesel engine of less emissions (This may not be an option if you are a permitted source. Check with the District if considering this option).

Deadlines for Submitting Permit or PEER Applications

ATC permit applications are due by July 1, 2008.

PEER applications are due by October 1, 2008.

Emission Requirements (all corrected to 15% O₂ on a dry basis):

Lean Burn Engines: 150 ppmv-NO_x (or 70% reduction due to retrofitting),
2000 ppmv-CO, and 750 ppmv-VOC

Rich Burn Engines: 90 ppmv-NO_x (or 80% reduction due to retrofitting),
2000 ppmv-CO, and 250 ppmv-VOC

Additional Requirements (all engines):

1. Operate and maintain engine per manufacturer,
2. Monitor operational characteristics of the engine per manufacture,
3. Utilize a non-resettable elapsed operating time meter, and
4. Keep monthly operating log.

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.

*The source testing and monitoring requirements 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 **Small Business Assistance (SBA)** hotlines shown below.

Permit or PEER?

The need for a permit or a PEER is determined by the total emissions from each farm. Farms with NOx or VOC emissions over 12.5 tons/year must obtain an ATC permit for each engine. Farms with lower emissions must obtain a PEER for each engine. Please note, the permitting threshold is lowering to 5 tons/year in 2009 and that owners/operators may proactively submit permit applications accordingly. For help determining if your engines will require a permit or a PEER and how to proceed, please call one of the District **Small Business Assistance (SBA)** hotlines shown below.

What if I have a Diesel Engine?

Diesel engines greater than 50 bhp are also subject to Rule 4702 and either a permit or PEER. Non-certified (Tier 0) engines that are 50-500 bhp shall be replaced with Tier 3 engines by January 1, 2010. ATC and PEER applications to do so shall be filed by July 1, 2009 and October 1, 2009 respectively.

Tier 1 and Tier 2 diesel engines installed prior to June 1, 2006 do not need to be replaced until January 1, 2015 or 12 years after first installation, whichever is later. At the earliest, ATC and PEER applications for the replacement of these Tier 1 and Tier 2 engines shall be filed by July 1, 2014 and October 1, 2014 respectively.

Please note that existing emergency stand-by engines have already passed the deadline for required permits.

Please call one of the District **Small Business Assistance (SBA)** hotlines shown below for further detail and guidance regarding diesel engines.

Where Can I get Help?

Please call one of these District **Small Business Assistance (SBA)** hotlines for assistance:

Modesto Office:	209-557-6446
Fresno Office:	559-230-5888
Bakersfield Office:	661-326-6969

Related Internet Links

Full Rule 4702 text: <http://valleyair.org/rules/currentrules/r4702.pdf>

ATC permit applications: <http://www.valleyair.org/busind/pto/ptoforms/1ptoforidx.htm>

PEER applications: <http://www.valleyair.org/busind/pto/PEER/ApplicationForms.htm>