Agricultural Internal Combustion Engines

On April 20, 2006 and again on January 18, 2007, the District's Governing Board adopted several amendments to Rule 4702 – *Internal Combustion Engines – Phase 2*. This rule regulates air pollution emissions from internal combustion engines rated greater than 50 brake horsepower, including agricultural engines. As a result, it may be necessary to replace existing engines with new certified engines or to equip existing engines with pollution control equipment that meets the required emission limits. Rule 4702 outlines several agricultural specific exemptions, including engines used to power or propel implements of husbandry (tractor engines, etc.), wind machines, and mobile agricultural equipment (sprayers, balers, harvest equipment, etc.). Engines included within these categories are not required to comply with Rule 4702.

Beginning **June 1, 2006**, the following new provisions of Rule 4702 take effect for new and existing agricultural engines:

- **Recordkeeping** –

  A log that contains a record of the total hours of engine operation per month.

- **Monitoring Requirements** –

  Engine operation and performance must be monitored as follows:

  1. **Install and operate a nonresettable hour meter or use a District-approved alternative strategy.** District approved alternatives can include strategies such as computerized monitoring or fuel usage records. The District shall be contacted to receive approval prior to using an alternative strategy.

  2. Monitor operational characteristics of the engine as per engine manufacturer and/or emission control system supplier recommendations.

  3. For a spark-ignited (gaseous fuel such as natural gas, methane, ethane, propane, butane, LPG and gasoline) engine that has been equipped with pollution control equipment (catalytic converter, etc.), use a portable emissions analyzer to test emissions from the engine at least once every 2 years.
Additionally, Rule 4702 may require an agricultural operation to submit an Authority to Construct application, Permit-Exempt Equipment Registration (PEER) application, Emission Control Plan, and/or Inspection and Monitoring Plan in upcoming months. Please consult a copy of the rule at [www.valleyair.org](http://www.valleyair.org) or contact a District representative if you have questions about how Rule 4702 will affect your operation. Small Business Assistance representatives are available to help anyone at the following regional telephone numbers:

- Northern Region (Modesto) (209) 557-6446
- Central Region (Fresno) (559) 230-5888
- Southern Region (Bakersfield) (661) 326-6969
Agricultural Engine Compliance Timelines
(by engine category)

1) Non-Certified Diesel Engines (> 50 to 500 hp)
   - 6/1/06: Begin monitoring and recordkeeping on new and existing engines
   - 6/1/06: Install and operate a nonresettable hour meter or District approved alternative
   - 7/1/09: For engines requiring a permit, submit an ATC application
   - 1/1/10, Replace engine with EPA Certified Tier 3 or 4 engine
   - 10/1/09: For engines not requiring a permit, submit a PEER application

2) Non-Certified Diesel Engines (> 500 to 750 hp & < 1000 hours/year)
   - 6/1/06: Begin monitoring and recordkeeping on new and existing engines
   - 6/1/06: Install and operate a nonresettable hour meter or District approved alternative
   - 7/1/09: For engines requiring a permit, submit an ATC application
   - 1/1/10, Replace engine with EPA Certified Tier 3 engine
   - 10/1/09: For engines not requiring a permit, submit a PEER application

Abbreviations:
- ATC = Authority to Construct
- ECP = Emission Control Plan
- I&M = Inspection & Monitoring
- PEER = Permit-Exempt Equipment Registration
3) Non-Certified Diesel Engines (> 750 hp & < 1000 hours/year)

- **6/1/06** Begin monitoring and recordkeeping on new and existing engines
- **6/1/06** Install and operate a nonresettable hour meter or District approved alternative
- **1/1/11** For engines requiring a permit, submit an ATC application, ECP, & I&M Plan
- **7/1/11** Replace engine with EPA Certified Tier 4 engine

4) Non-Certified Diesel Engines (> 500 hp & >1000 hours/year)

- **6/1/06** Begin monitoring and recordkeeping on new and existing engines
- **6/1/06** Install and operate a nonresettable hour meter or District approved alternative
- **7/1/07** For engines requiring a permit, submit an ATC application, ECP, & I&M Plan
- **1/1/08** Comply with Rule 4702 emission limits
- **10/1/07** For engines not requiring a permit, submit a PEER application, ECP, & I&M Plan

**Abbreviations:**
- ATC = Authority to Construct
- ECP = Emission Control Plan
- I&M = Inspection & Monitoring
- PEER = Permit-Exempt Equipment Registration
Agricultural Engine Compliance Timelines (cont.)
(by engine category)

5) **EPA Certified Tier 1 or Tier 2 Diesel Engines (> 50 hp)**

- **6/1/06** Begin monitoring and recordkeeping on new and existing engines
- **6/1/06** Install and operate a nonresettable hour meter or District approved alternative
- **7/1/14** For engines requiring a permit, submit an ATC application
- **1/1/15** Replace Engine with EPA Certified Tier 4 engine
- **10/1/14** For engines not requiring a permit, submit a PEER application

6) **Spark-Ignited (Gas) Engines (> 50 hp)**

- **6/1/06** Begin monitoring and recordkeeping on new and existing engines
- **6/1/06** Install and operate a nonresettable hour meter or District approved alternative
- **7/1/08** For engines requiring a permit, submit an ATC application
- **1/1/09** Comply with Rule 4702 emission limits
- **10/1/08** For engines not requiring a permit, submit a PEER application

**Abbreviations:**
- ATC = Authority to Construct
- ECP = Emission Control Plan
- I&M = Inspection & Monitoring
- PEER = Permit-Exempt Equipment Registration