# San Joaquin Valley Unified Air Pollution Control District

## Rental Agricultural Irrigation Engines Permitting Policy

Approved By:

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Director of Permit Services

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**Purpose:** This policy is to establish the procedures to permit rental engines used in agricultural irrigation, including the replacement of such engines.

#### I. Background

Agricultural sources use irrigation pumping internal combustion engines to irrigate the cropland. Sources may own their own engines, contract with a rental company to provide the engines (on a temporary or a seasonal basis), or use a combination of owned and rented engines.

Rental units are replaced periodically – generally they are used during the irrigation season and then removed from the farm, with a different replacement engine returning to the farm the following season. One difficulty this creates for the farmer is that, because there is rarely an opportunity to bring an identical engine back, permit revisions are required by District rules. This creates delays and uncertainty for the farmer at a time when irrigation may be required immediately.

This policy is to provide a simplified and known process to address these permitting issues

## II. Applicability

This policy applies to all rental irrigation internal combustion (IC) engines at agricultural operations.

## III. Permit Equipment Descriptions

The Authority to Construct (ATC) and Permit to Operate (PTO) equipment descriptions for rental agricultural irrigation engines will identify it as a rental engine and include the make and model of the engine, its horsepower rating, and the certified Tier level of the engine. Engine serial numbers will not be placed on rental engine ATC's and PTO's.

**Example Equipment Description:** 

RENTAL TRANSPORTABLE XXX BHP MODEL ZZZ TIER # DIESEL-FIRED IC ENGINE POWERING AN AGRICULTURAL IRRIGATION PUMP

#### IV. Replacement Engines

A rental engine that replaces an existing rental engine at an agricultural source may qualify as a Routine Replacement per New Source Review (NSR), Rule 2201 Section 3.35, under conditions discussed in part a, below. Part b discusses how to handle replacements that do not qualify as "routine replacements."

#### a. Routine Replacements

To qualify as a Routine Replacement, the replacement rental engine must meet the requirements of Rule 2201 Section 3.35, as follows:

- 3.35.1 no increase in permitted emissions from the replacement engine:

  For the purposes of this policy, if the replacement engine is the same or higher Tier rating as the engine being replaced, and 3.35.2 is met, we will consider this condition to be met.
- 3.35.2 can have up to a 10% increase in design capacity, if the identical engine is not available:
  - For rental engines, it is assumed that the identical unit will not be available; therefore, the replacement engine is allowed up to a 10% increase in hp rating, compared to the engine being replaced, without additional analysis.
  - However, if the replacement engine is larger, sufficient conditions must be added to the new permit to avoid an increase in permitted emissions (a fuel-use limit is sufficient for these purposes).
- 3.35.3 the replacement will perform the same function:

  This policy applies only to irrigation pumping engines replacing irrigation pumping engines, so this condition is met.
- 3.35.4 replacing an irrigation pump engine will not result in a
  Reconstructed Source or a Reconstruction:
  Since the replacement of an irrigation pump engine can be presumed to not cost 50% of the cost of the entire farm, this condition is met.
- 3.35.5 Must be subject to a BARCT rule:

  Irrigation engines are subject to Rule 4702, which is a BARCT rule, so this condition is met.

Unlike new units or non-routine replacements, Routine Replacements are exempt from BACT, per Rule 2201 Section 4.2.6. A risk management review (RMR) will not be required, as a routine replacement rental engine will have the same or lower emissions and similar stack characteristics and will be located in the same rural location, will not have an increased risk to the potentially exposed population. Similarly, the public notification requirements of Rule 2201, Section 5.4 are not

triggered as there can be no increase in emissions or changes in conditions or location of its use, under the conditions outlined above.

Routine Replacements also can enjoy the Application Shield of Rule 2201 Section 8.0. This section allows the replacement engine to be installed without first obtaining an ATC, so long as the application for ATC is submitted within 7 calendar days of the installation, and the source operates in compliance with all applicable requirements of federal, state and District rules and regulations.

However, routine replacements may still be subject to offsets if located at a major source and the existing unit is not a "clean emissions unit"! (See Rule 2201, sections 4.7.1.1, 3.8, and 3.13.) Therefore, operators of major sources should be cautioned that the application shield discussed above may not apply, and that they should contact the District before proceeding unless they are sure the engine being replaced is a clean emissions unit.

If obtaining an ATC before installing the replacement engine, a source may propose to install a specified engine or equivalent, pursuant to District Policy APR 1040 – Flexibility in Equipment Descriptions in ATCs.

#### b. Non-Routine Replacements

Replacements that do not qualify as Routine Replacements under NSR will be subject to BACT, offsets, public noticing and Risk Management Review, as applicable. A source may propose to install a specified engine or equivalent, pursuant to District Policy APR 1040 – Flexibility in Equipment Descriptions in ATCs.

An ATC must be obtained prior to installing a non-routine replacement engine.

#### c. Permit Renewal Fees for Replacement Engines

The replacement engine, as a new emissions unit, will be logged into the Permit Administration System (PAS) as a new permit unit. However, for purposes of permit renewal fees, any permit fees paid for on the existing engine will be credited to the prorated permit fee of the replacement engine.

### IV. New Engines

A new rental engine installed at an agricultural source (one that is not replacing an existing engine at the source) shall be treated as a new emissions unit, and subject to New Source Review (NSR), including Best Available Control Technology (BACT), offsets, public noticing, and also Risk Management Review (RMR). A source may propose to install a specified engine or equivalent, pursuant to District Policy APR 1040 – Flexibility in Equipment Descriptions in ATCs. An ATC must be obtained prior to installing the engine.