

(Adopted May 11, 2001)

**RULE 2507. PILOT CREDIT GENERATION PROGRAM FOR AGRICULTURAL PUMPS**

(a) Purpose

The purpose of this rule is to provide opportunities to generate NO<sub>x</sub> area source credits (ASCs) for use in RECLAIM through the voluntary electrification of agricultural pumps.

(b) Applicability

(1) This rule applies to persons who voluntarily elect to generate NO<sub>x</sub> ASCs, which may be used in RECLAIM through the replacement of an existing diesel-fueled engine used to power an agricultural pump with an electric motor.

(2) This rule does not apply to any:

(A) emission reductions produced by monies from any public air quality related funding program including but not limited to Rule 2202, the Carl Moyer Memorial Air Quality Standards Attainment Program, or AB2766 funding except funds exclusively collected for and designated by the Executive Officer for credit generation projects; or

(B) emission reductions required pursuant to any law, rule, or regulation, or legal instrument such as a legal settlement or consent decree.

(c) Definitions

(1) **ACTIVITY LEVEL (AL)** means for the purpose of this rule, the amount of kilowatt-hours (kW-hr) of energy or diesel fuel consumed per year for each electric motor or engine used within the District.

(2) **AGRICULTURAL PUMP** means for the purpose of this rule, a stationary pump less than 600 horsepower used to move water for irrigation purposes.

(3) **APPLICATION** means for the purpose of this rule, the Rule 2507 ASC Application as specified in subdivision (e).

- (4) AREA SOURCE CREDIT (ASC) means for the purpose of this rule, emission reduction credits that meet the requirements of this rule and are issued as specified in subdivision (h).
- (5) BASELINE EMISSION FACTOR ( $EF_{\text{base}}$ ) means for the purpose of this rule, the emission factor used to quantify annual emissions from a new diesel-fueled engine used to supply power to an agricultural pump that would have been purchased in lieu of an electric motor.
- (6) CREDIT GENERATION PERIOD means the timeframe that ASCs are being generated and begins on the date that the requirements of subdivision (d) are met and can extend no longer than the lifetime of the original diesel-fueled engine, except as provided in subdivision (i). The first segment of the credit generation period, which may be 12 months or less, is referred to as the “initial credit generation period” and each 12 month segment of the credit generation period thereafter, is referred to as the “annual credit generation period.”
- (7) CREDIT ISSUANCE PERIOD means the timeframe that ASCs are issued and begins on the date that the requirements of subdivision (h) are met.
- (8) DIESEL FUEL means any fuel that is commonly known as diesel fuel No. 1-D or 2-D, or meets the specifications in ASTM D 975, Standard Specifications for Diesel Fuel Oils.
- (9) DISTRICT means the geographical area defined by Rule 103 – Definition of Geographical Area.
- (10) EVALUATION YEAR means for the purpose of this rule, 2006 which represents the initial evaluation year and subsequent years thereafter as determined pursuant to paragraph (g)(3) during which the District, CARB, and EPA will assess whether ASCs may continue to be generated or if a portion or all future ASCs need to be discontinued or discounted to ensure credits remain surplus.
- (11) RECLAIM FACILITY means any stationary source subject to Regulation XX, pursuant to Rule 2001 - Applicability.
- (12) RETIRE OR RETIRED means that the credit, regardless of the expiration date of the credit, can no longer be transferred or used.
- (13) SURPLUS means that emission reductions achieved throughout the duration of the emission reduction activity that are not required or relied upon by any local, state, or federal rule, or regulation, and the federal

Clean Air Act; and are not required or relied upon in an attainment demonstration, reasonable further progress demonstration, or emissions inventory thereby ensuring that there is no double counting of emission reductions.

(d) Credit Generator Requirements

Any person that elects to generate ASCs under this rule shall meet all of the following requirements:

- (1) Replace a diesel-fueled engine with an electric motor that is used to power an agricultural pump;
- (2) Demonstrate that the purchase contract for acquisition of the new replacement electric motor was signed no earlier than March 1, 2001 and that installation of the electric motor did not occur prior to May 11, 2001;
- (3) Demonstrate that each agricultural pump is located in the district;
- (4) Demonstrate that all agricultural pumps, are equipped with a non-resettable meter capable of measuring the kilowatt-hours consumed;
- (5) Submit an Application as specified in subdivision (e); and
- (6) Demonstrate compliance with the monitoring, recordkeeping, and reporting requirements specified in subdivision (j).

(e) Application

(1) Any person that elects to generate ASCs under this rule shall submit an Application to the District no later than 30 days after the initial electric motor replacement and before January 1, 2004. The Application shall include the following:

- (A) A description of the project, including, at a minimum, the location of the field or agricultural area where the agricultural pumps are installed, plot plan identifying specific location of the pumps in the field and the location of the meter required pursuant to paragraph (d)(5), number of agricultural pumps, and pump identification;
- (B) Identification of the existing diesel-fueled engines powering the pumps and new electric motors including each engine and motor manufacturer, model, model year, and horsepower;
- (C) The projected installation date of each new electric motor that would represent the beginning of the credit generation period;

- (D) Identification of the intended user(s) of the ASCs, if available.
  - (E) The historical annual average activity level for each existing diesel-fueled engine in the previous calendar two-year period; and
  - (F) Designation of the RECLAIM Compliance Cycle for each agricultural pump for the initial and each annual credit generation period for the entire credit generation period.
  - (G) The projected activity level for the initial credit generation period and the projected annual activity level after the initial credit generation period which coincides with either RECLAIM Compliance Cycle 1 or 2, up to the evaluation year, not to exceed a five-year credit generation period. The projected activity level for any single new replacement electric motor should not exceed 120% of the most recent two-year historical annual average activity level specified in subparagraph (e)(1)(E).
- (2) If the installation date, as specified in subparagraph (e)(1)(C) of the electrified agricultural pump is before the Application is approved, the Application shall include the following additional information:
- (A) Proof of installation of the new replacement electric motor;
  - (B) Proof that the original diesel-fueled engine is destroyed, sold, or otherwise transferred or relocated to a new owner who operates the engine outside of the district with the location and identity of the new owner, if applicable, along with a copy of a written notification informing the new owner that the original engine must not be operated, sold, or otherwise transferred or delivered in the district or in Ventura or Santa Barbara Counties; and
  - (C) Written certification or signed declaration from the credit generator that any original diesel-fueled engine that is not sold, scrapped, or otherwise transferred to a new owner or location outside the district has not been, and will not be operated within the district or in Ventura or Santa Barbara Counties during the credit generation period.

- (3) If the installation date, as specified in subparagraph (e)(1)(C) is after the Application is approved, the credit generator shall provide information specified under paragraph (e)(2) prior to credit issuance pursuant to paragraph (h)(1).
  - (4) The Application shall be deemed a plan, and plan fees shall be assessed in accordance with Rule 306– Plan Fees.
  - (5) The Executive Officer shall approve or disapprove the Application and any subsequent revisions submitted pursuant to paragraph (e)(6), in writing within 90 days of submittal of a complete Application or Application revision.
  - (6) Any person that submits an Application may amend the Application to revise:
    - (A) information provided under subparagraphs (e)(1)(A) through (e)(1)(E) at any time; or
    - (B) the original projected activity levels specified in subparagraph (e)(1)(G) no later than 180 days after the beginning eligibility credit issuance date pursuant to subparagraph (h)(2)(B).
    - (C) remove an agricultural pump from the Application, provided the credit generator retires ASCs or ASCs converted into RTCs to cover reductions projected for that agricultural pump for the entire current and subsequent credit generation periods in which the use of the pump would have generated credits.
  - (7) An Application shall not be amended to add an agricultural pump that is removed from the Application pursuant to subparagraph (e)(6)(C) until the following annual credit generation period.
  - (8) The credit generation period shall begin no earlier than the date the Application is received by the district.
- (f) ASC Quantification
- (1) ASCs for agricultural pumps shall be quantified using the following equation:

$$\text{ASC} = \frac{(\text{EF}_{\text{base}} - \text{EF}_{\text{opt}}) \times \text{AL}}{454}$$

Where

- ASC = Area Source Credit (pounds)  
 EF<sub>base</sub> = The Baseline emission factor (g/kW-hr)  
 EF<sub>opt</sub> = Optional emission factor (g/kW-hr)  
 AL = Activity level (kW-hr)  
 454 = Conversion factor from grams to pounds

- (2) The projected and actual activity level used to quantify the ASCs shall be determined from the information submitted pursuant to subdivisions (e) and (j), respectively.
  - (3) To quantify ASCs for engines that are replaced with an electric motor on or after January 1, 2001, the credit generator shall use the values of baseline and optional emission factors in Table 1 – NO<sub>x</sub> Baseline and Optional Emission Factors based on the horsepower of the replaced engine and the year the existing diesel-fueled engine is replaced.
  - (4) For purposes of quantifying the historical annual average activity level for each existing diesel-fueled engine in the previous calendar two-year period, a conversion factor of 14.9 kW-hr/gallon (20 bhp-hr/gallon) shall be used to convert the gallons of fuel used per year to kilowatt-hours consumed per year.
- (g) Source Category Evaluation
- (1) On or before July 1, 2006, the Executive Officer with CARB and EPA shall complete an evaluation on Agricultural pumps and agree whether future ASCs need to be either discontinued or discounted to ensure credits remain surplus.
  - (2) The evaluation shall include, but is not limited to, an assessment of current and future local, state, and federal rules and regulations affecting each source category.
  - (3) After the initial evaluation year, the evaluation performed in paragraph (g)(1) shall be completed on a timeframe as agreed to by the District, CARB, and EPA, but not more than once per year.

- (4) Subsequent evaluations performed pursuant to paragraph (g)(3) shall be completed at least six months prior to end of each evaluation period specified in paragraph (g)(3), for the remainder of the pilot program.
  - (5) No future ASCs shall be issued if the evaluation is not completed or the District, CARB and EPA do not agree on whether future ASCs need to be discontinued or the amount that the ASCs need to be discounted.
- (h) Credit Issuance
- (1) The Executive Officer shall issue ASCs provided the credit generator has written approval of the Application and has provided the information specified in paragraph (e)(2).
  - (2) The Executive Officer shall issue ASCs:
    - (A) in pounds of NO<sub>x</sub> for the amount indicated in the approved Application in one-year increments;
    - (B) designated with a beginning and ending date based on the date of credit issuance;
    - (C) for the number of annual credit issuance periods up to December 31 of the evaluation year and shall be based on the annual projected activity level specified in subparagraph (e)(1)(G); and
    - (D) discounted upon issuance by:
      - (i) nine percent which will be retired for the benefit of the environment; and
      - (ii) one percent which will either fund the Rule 518.2 – Federal Alternative Operating Conditions offset program, or if Rule 518.2 funding is not needed, be retired for the benefit of the environment.
  - (3) Any reductions other than NO<sub>x</sub> that result from implementation of projects subject to this rule shall be retired for the benefit of the environment and ineligible for transfer or use.
  - (4) The actual amount of ASCs issued shall be based on the approved Application, or any subsequent verification by the Executive Officer.
  - (5) ASCs converted to RTCs shall be issued for either RECLAIM Compliance Cycle 1 or 2 provided that each annual credit generation period coincides with the entire cycle selected. If the initial credit generation period begins prior to the start of a complete RECLAIM Compliance Cycle, that portion of ASCs converted to RTCs shall be

issued for the current or previous cycle provided that this initial credit generation period completely coincides with the cycle selected.

- (6) Any ASCs not used by the specified expiration date shall be retired to benefit the environment and be ineligible for transfer or use.
  
- (i) **Loss or Malfunction**
  - (1) If any agricultural pump identified in the approved Application is replaced due to loss or a malfunction that is not the result of normal use during the current credit generation period, the credit generator shall replace the agricultural pump with a pump powered by an electric motor.
  - (2) The credit generator shall be responsible for obtaining credits and surrendering them to the Executive Officer to make up any potential shortfall in credits according to the reconciliation procedures of subdivision (k) as a result of the following:
    - (A) any agricultural pump destroyed or malfunctions after 10 years from the initial credit issuance date;
    - (B) any agricultural pump that is not replaced pursuant to paragraph (i)(1); and/or
    - (C) any reduction in activity level during the replacement of the malfunctioning agricultural pump.
  - (3) Notwithstanding the requirements of paragraph (i)(2), no additional ASCs shall be issued:
    - (A) due to the agricultural pump having a higher baseline emission factor than that used for the original agricultural pump; or
    - (B) for use of the replacement agricultural pump beyond the current credit generation period.
  
- (j) **Monitoring, Recordkeeping, and Reporting**
  - (1) For all agricultural pumps identified in the approved Application, credit generators shall monitor and maintain quarterly records of the number of kilowatt-hours of energy that is supplied to the agricultural pump based on a kilowatt-hour meter at the beginning and end of each quarter.
  - (2) For each agricultural pump, credit generators shall maintain quarterly records of:
    - (A) the location of the agricultural pump;

- (B) agricultural pump identification, electric motor make, model, model year, and serial number;
    - (C) agricultural pump loss, or sale; and
    - (D) when an agricultural pump is replaced due to loss or malfunction, identification of each replaced and replacement agricultural pump including make, model, model year, and serial number;
  - (3) Within 30 days after the end of each twelve-month credit generation period, the credit generator shall submit:
    - (A) the activity level specified in paragraph (j)(1) for the previous twelve-month credit generation period; and
    - (B) the information specified in subparagraphs (j)(2)(A) through (j)(2)(D) if any agricultural pump identified in the Application is replaced, lost, or sold.
  - (4) Notwithstanding paragraph (j)(3), if the initial credit generation period begins prior to the start of a complete RECLAIM Compliance Cycle and is three months or less, the credit generator shall submit the information specified in paragraph (j)(3) within 30 days after the end of the annual credit generation period following the initial credit generation period. For an initial credit generation period that is greater than three months, the credit generator shall submit the information specified in paragraph (j)(3) within 30 days after the end of the initial credit generation period.
  - (5) If the evaluation performed under subdivision (g) indicates that a portion or all future ASCs are surplus, and if the credit generator elects to continue generating ASCs, at least 60 days before the end of the evaluation year, the credit generator shall submit the projected annual activity level for the following credit generation period, not to exceed five years.
- (k) Annual Reconciliation
- (1) The actual activity level submitted pursuant to paragraphs (j)(3) and (j)(4) shall be reviewed by the Executive Officer upon submittal to evaluate if any shortfall exists between the actual activity level and the projected activity level.
  - (2) If a shortfall exists between the actual and projected activity levels, the credit generator and user are subject to the penalty provisions specified under subdivision (m).

- (3) If the actual activity level exceeded the projected activity level, then the Executive Officer shall, after performing the evaluation required by paragraph (k)(1), issue additional ASCs equal to the amount of the increase and pursuant to subdivision (h) for use in the RECLAIM Compliance Cycle that ends no later than six months from the last day of the credit generation period of which the increase in activity level occurred.
- (l) **Credit Use**  
ASCs generated under this rule may be used as RTCs in the RECLAIM program.
- (m) **Penalties**

  - (1) If a shortfall exists pursuant to paragraph (k)(1), credits equal to 110 percent of the shortfall shall be obtained and surrendered to the Executive Officer such that the applicant shall retire NO<sub>x</sub> ASCs generated under the same or different Application or RTCs that are approved and designated for use within the same RECLAIM cycle or if not available, from the next RECLAIM cycle.
  - (2) Any person submitting an Application who falsifies information in the Application or fails to implement any provision of the Application, shall be subject to the penalties specified in the Health and Safety Code for violation of District rules and shall be grounds for the Executive Officer to take one or more of the following actions:

    - (A) disapprove the Application and void all previously issued ASCs, and those already converted to RTCs, that have not yet expired;
    - (B) designate the applicant to be ineligible to generate ASCs; or
    - (C) assess the penalty specified in paragraph (m)(1).
  - (3) If the shortfall cannot be reconciled through paragraph (m)(1), any person who uses ASCs converted into RTCs generated under this rule at a RECLAIM facility where there is a shortfall in emission reductions or where previously issued ASCs, and those already converted to RTCs, that have not yet expired are voided, shall be subject to the provisions specified in Rule 2010 – Administrative Remedies and Sanctions for RECLAIM rule violations. If there are multiple credit holders or users of credits generated under the same Application, each holder or user shall

retire ASCs or RTCs according to their prorated share of credits purchased.

(n) Program Review

- (1) On or before March 2003 and biannually thereafter, up until credits are discontinued according to the source category evaluation performed pursuant to subdivision (g), the Executive Officer shall complete a review and present a report to the Governing Board that includes but not be limited to the following information:
  - (A) General description of projects participating in the pilot program and the amount of NO<sub>x</sub> ASCs, including the amount converted to RTCs, generated under the pilot program;
  - (B) The location of the credit generation projects and facilities using RTCs under this pilot program;
  - (C) The amount of NO<sub>x</sub> ASCs retired to benefit the environment; and
  - (D) The amount of concurrent non-NO<sub>x</sub> emission reductions such as PM and toxic air contaminants, generated under the pilot program that have been retired to benefit the environment.
- (2) The Governing Board may suspend approval of pending Applications and receipt of additional Applications through a noticed public hearing.

**Table 1**  
**NO<sub>x</sub> Baseline and Optional Emission Factors**

<b>Size (hp)</b>	<b>Replacement Year</b>	<b>NO<sub>x</sub><sup>1</sup> Baseline Emission Factor (g/kW-hr)</b>	<b>NO<sub>x</sub><sup>1</sup> Baseline Emission Factor (g/bhp-hr)</b>	<b>NO<sub>x</sub><sup>2</sup> Optional Emission Factor (g/kW-hr)</b>
50 ≤ hp < 100	2001 - 2003	9.2	6.9	0.1
50 ≤ hp < 100	2004	7.0	5.2	0.1
100 ≤ hp < 175	2001 - 2002	9.2	6.9	0.1
100 ≤ hp < 175	2003 - 2004	6.2	4.6	0.1
175 ≤ hp < 300	2001 - 2002	9.2	6.9	0.1
175 ≤ hp < 300	2003 - 2004	6.2	4.6	0.1
300 ≤ hp < 600	2001 - 2004	6.0	4.5	0.1

1. Baseline emission factors represent NO<sub>x</sub> portion only of a combined NO<sub>x</sub> + THC standard based on 40CFR Part 89.112 – Control of Emissions of Air Pollution from Nonroad Diesel Engines and Title 13 California Code of Regulations Section 2423.
2. Optional emission factor based on in-Basin electric power production NO<sub>x</sub> emission factor of 0.232 pounds per megawatt-hour.