

**MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS  
REGULATION II – PERMITS AND FEES**

**RULE 204  
EMISSION REDUCTION CREDIT (ERC) GENERATION, CERTIFICATION, AND  
USE**

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Adopted 05/07/2003; Revised 12/11/2019

**MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS  
REGULATION II - PERMITS AND FEES**

**RULE 204  
EMISSION REDUCTION CREDIT (ERC) GENERATION, CERTIFICATION, AND  
USE**

**SECTION 100 – GENERAL**

- 101 PURPOSE:** To facilitate the creation and trading of emission reduction credits (ERCs) for use as offsets by providing a process for:
- 101.1** Creating emission reduction credits for reductions achieved by permitted generators and regulatory generators.
  - 101.2** Certifying credits as meeting offset requirements in advance of the certified credits' use for that purpose.
  - 101.3** Registering certified credits in the Arizona Emissions Bank.
  - 101.4** Using certified credits registered in the Arizona Emissions Bank.
  - 101.5** Using certified credits not registered in the Arizona Emissions Bank.
- 102 APPLICABILITY:** The provisions of this rule apply to the following persons and entities:
- 102.1** A permitted generator.
  - 102.2** A plan generator.
  - 102.3** A regulatory generator.
  - 102.4** The owner or operator of a permitted stationary source that intends to use certified credits as offsets.

**SECTION 200 – DEFINITIONS:** For the purpose of this rule, the following definitions shall apply in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County Air Pollution Control Regulations, the definitions in this rule take precedence.

- 201 ACCOUNT HOLDER:** Any person or entity who has opened an account with the Arizona Emissions Bank.
- 202 ARIZONA EMISSIONS BANK:** The system created by the Arizona Department of Environmental Quality (ADEQ) to record and make publicly available information on the issuance, certification, transfer, retirement, and use of emission reduction credits.
- 203 BASELINE EMISSIONS:** The average rate, in tons per year as rounded down to the nearest one tenth (1/10) of a ton, at which the generator actually emitted the pollutant during the two preceding calendar years, or two calendar years more representative of

normal emissions within the 5-year period immediately before the emissions reduction is achieved.

- 204 CERTIFIED CREDIT:** An ERC that has met the criteria in this rule for certification and has been issued by the Maricopa County Air Quality Department (MCAQD).
- 205 ELECTRIC STANDBY EQUIPPED TRU:** A transport refrigeration unit (TRU) with a refrigeration system that may be selectively powered by either an integral, diesel fueled internal combustion engine, or an integral, electric powered motor.
- 206 EMISSION REDUCTION CREDIT (ERC):** A reduction in qualifying emissions, expressed in tons per year as rounded down to the nearest one tenth (1/10) of a ton, for which a generator has submitted an application pursuant to this rule. ERCs do not have property rights associated with them.
- 207 ENFORCEABLE:** Specific measures for assessing compliance with an emissions limitation, control, or other requirement established in a permit or in this rule in a manner that allows compliance to be readily determined by, but not limited to, an inspection of records and reports.
- 208 GENERATOR:** Any permitted source or other activity that has made or proposes to make reductions in qualifying emissions.
- 209 IDLE REDUCTION TECHNOLOGY:** A technology or device that reduces the need for long duration idling.
- 210 LONG DURATION IDLING:** The operation of a diesel engine at a time in which the main drive engine is not engaged and in gear for a period greater than 15 consecutive minutes except when associated with routine stoppages due to traffic congestion or for the loading or processing of cargo.
- 211 OFFSET-CREATION RULE:** A Maricopa County Air Pollution Control Regulation that has been approved into the State Implementation Plan (SIP) and provides a method for allowing emission reductions from specific activities to qualify as offsets. Rule 242 (Emission Offsets Generated by the Voluntary Paving of Unpaved Roads) is an example of an offset-creation rule.
- 212 OFFSETS:** Reductions in emissions required under Rule 240 (Federal Major New Source Review (NSR)) of these rules.
- 213 ONSITE EQUIPMENT:** Mobile, nonroad industrial, and ground support equipment that are part of the same fleet and used at the same location such as equipment located at, but not limited to, an airport, a distribution center, or a rail yard.
- 214 PERMANENT:** Reductions in qualifying emissions that are enforceable and enduring for the duration of federal major new source review obligations.

- 215 **PERMITTED GENERATOR:** A generator that is a stationary source subject to a permit and that seeks credits for reductions that are, or will be made enforceable through a permit condition.
- 216 **PLAN GENERATOR:** A generator that intends to achieve or has achieved reductions in qualifying emissions in compliance with an emission reduction plan approved into the Arizona State Implementation Plan (SIP).
- 217 **PRIVATE TRUCK STOP:** A private place of business (non-commercial/non-public) that provides services and parking spaces to only its private fleet drivers and trucks.
- 218 **QUALIFYING EMISSIONS:** Emissions of any conventional air pollutant, other than elemental lead, or any precursor of a conventional air pollutant from any activity when generated within the Maricopa County nonattainment area associated with the conventional air pollutant.
- 219 **QUANTIFIABLE:** With respect to emissions, including the emissions involved in equivalent emission limits and emission trades, capable of being measured or otherwise determined in terms of quantity and addressed in terms of character. Quantification may be based on emission factors, stack tests, monitored values, operating rates, and averaging times, materials used in a process or production, modeling, or other reasonable measurement practices.
- 220 **REAL:** A reduction in actual emissions released to the air resulting from a physical change or change to the method of operations by a generator.
- 221 **REGULATORY GENERATOR:** A generator that has achieved reductions in qualifying emissions by compliance with an offset-creation rule.
- 222 **SURPLUS:** A reduction in qualifying emissions not otherwise required by a federally applicable requirement and not relied upon in the State Implementation Plan (SIP).
- 223 **TRANSPORT REFRIGERATION UNIT (TRU):** A refrigeration system powered by an integral, internal combustion engine designed to control the environment of temperature sensitive products that are stored in trucks and trailers. A TRU is capable of providing cooling or heating for truck and trailer cargo spaces.
- 224 **TRUCK STOP ELECTRIFICATION (TSE):** A stationary idle reduction technology that provides electricity to power on-board truck equipment in lieu of idling the main truck engine or using onboard auxiliary power units (APUs). Typically installed as Electrified Truck Spaces and Electrified Parking Spaces.

## SECTION 300 – STANDARDS

### 301 **CERTIFICATION OF CREDITS FOR EMISSION REDUCTIONS BY A PERMITTED GENERATOR:**

#### 301.1 **Application:**

- a. The owner or operator of a permitted generator may apply for certified credits for reductions in qualifying emissions at any time after filing either of the following with the Control Officer:
  - (1) An application for a permit revision seeking the imposition of conditions to make the reductions in qualifying emissions permanent and enforceable; or
  - (2) A notice of permit termination seeking to make the shutdown of a stationary source and the resulting reductions in qualifying emissions permanent and enforceable.
- b. An application for certified credits shall be filed with the Control Officer on the form prescribed by the MCAQD and shall include:
  - (1) Information on the identity, type, ownership, and location of the permitted generator.
  - (2) A description of the actions that have resulted or will result in the reductions in qualifying emissions;
  - (3) Information on the amount of and methodology for calculating the reductions in qualifying emissions for each pollutant subject to the application;
  - (4) Other information necessary to verify that the reductions in qualifying emissions qualify as permanent, quantifiable, surplus, enforceable, and real;
  - (5) The actual date or anticipated date of the reductions in qualifying emissions, as applicable; and
  - (6) A signed statement by a responsible official, as defined in Rule 100 (General Provisions and Definitions), verifying the truthfulness and accuracy of all information provided in the application.

**301.2 Action on Application:** The Control Officer shall review the application for credits and:

- a. Issue one certified credit for each ton, as rounded down to the nearest one tenth (1/10) of a ton, per year of reduction that qualifies as permanent, quantifiable, surplus, enforceable, and real; and
- b. Provide the applicant with a certificate representing the number of certified credits issued.
- c. If no emission reductions qualify to be certified, then no certified credits will be issued.

**301.3 Registration of Certified Credits in the Arizona Emissions Bank:** Certified credits may be registered in the Arizona Emissions Bank but registration is not required. See Section 306 (Registration of Certified Credits in the Arizona Emissions Bank) for procedures regarding registration of certified credits in the Arizona Emissions Bank.

**302 CERTIFICATION OF CREDITS FOR EMISSION REDUCTIONS BY A REGULATORY GENERATOR:**

**302.1 Application:**

- a. The owner or operator of a regulatory generator may apply for credits for reductions in qualifying emissions at any time after complying with the applicable requirements in Section 303 (Truck Stop Electrification (TSE)), Section 304 (Transport Refrigeration Unit (TRU)), or Section 305 (Onsite Equipment).
- b. An application for credits shall be filed with the Control Officer on the form prescribed by the MCAQD and shall include the information found in Section 301.1.b.

**302.2 Action on Application:** The Control Officer shall review the application for credits and:

- a. Issue one certified credit for each ton, as rounded down to the nearest one tenth (1/10) of a ton, per year of reduction that qualifies as permanent, quantifiable, surplus, enforceable, and real.
- b. Provide the applicant with a certificate representing the number of certified credits issued.
- c. If no emission reductions qualify to be certified, then no credits will be issued.

**302.3 Registration of Certified Credits in the Arizona Emissions Bank:** Certified credits may be registered in the Arizona Emissions Bank but registration is not required. See Section 306 (Registration of Certified Credits in the Arizona Emissions Bank) for procedures regarding registration of certified credits in the Arizona Emissions Bank.

**303 TRUCK STOP ELECTRIFICATION (TSE):** A regulatory generator that owns a private truck stop and uses truck stop electrification idle reduction technology to reduce long duration idling emissions:

**303.1** May apply to certify ERCs by meeting the following requirements:

- a. **Truck Stop Location:** The truck stop electrification idle reduction technology used to generate credits shall be installed at a private truck stop that is located within a nonattainment area within the jurisdiction of the MCAQD.
- b. **Quantification of Baseline Emissions:** The regulatory generator shall quantify baseline emissions from each electrified truck space following the calculation methodology in Appendix A (Calculations for Determining Emission Reductions from Each Electrified Truck Space).
- c. **Quantification of Emission Reductions:**
  - (1) The regulatory generator shall:
    - (a) Quantify the amount of emission reductions from each electrified truck space following the calculation methodology in Appendix A (Calculations for Determining Emission Reductions from Each Electrified Truck Space).
    - (b) Calculate the amount of emission reductions as rounded down to the nearest one tenth (1/10) of a ton.

- (2) Calculations shall not include:
  - (a) Emission reductions created or used under any other emissions trading program, emission reductions used to satisfy the State Implementation Plan including transportation conformity requirements, emission reductions funded by the Diesel Emissions Reduction Act, or any emission reductions pursuant to a federal consent decree, or state and local settlements.
  - (b) Emission reductions from the use of mobile idle reduction technology, such as auxiliary power units (APUs).

**303.2** Shall comply with all of the following operating, utilization, monitoring, recordkeeping, and maintenance requirements:

- a. **Idle Reduction Technology Operation and Use:** Idle reduction technology shall be operated and maintained in accordance with the manufacturer's written instructions.
  - (1) Trucks using idle reduction technology shall:
    - (a) Not use the truck's engine while using the idle reduction technology.
    - (b) Be properly modified, if necessary, in accordance with the manufacturer's instructions, to allow for the use of the idle reduction technology.
- b. **Emission Reduction Monitoring:** The regulatory generator shall monitor the continued generation of emission reductions using the following tamper-proof equipment:
  - (1) TSE-based dataloggers for recording truck plug-in and TSE runtime; and
  - (2) TSE-based electricity flow meters for recording TSE electricity consumption.
  - (3) All monitoring equipment shall be operated and maintained in accordance with the manufacturer's written instructions.
- c. **Recordkeeping:** A regulatory generator is responsible for creating and maintaining records from the emission reduction monitoring as required in:
  - (1) Section 501 (Recordkeeping and Records Retention);
  - (2) Section 502 (Inspections); and
  - (3) Section 503 (Truck Stop Electrification (TSE) Records).
- d. **Maintenance of Electrified Truck Stop Parking Space:** A regulatory generator shall maintain each electrified truck stop parking space used to generate certified credits.

**304** **TRANSPORT REFRIGERATION UNIT (TRU):** A regulatory generator that reduces truck and trailer TRU emissions by using electricity to power electric standby equipped TRUs:

**304.1** May apply to certify ERCs by meeting the following requirements:

- a. **Location:** Electric standby equipped TRUs shall be located within a nonattainment area located within the jurisdiction of the MCAQD.



- b. **Quantification of Baseline Emissions:** The regulatory generator shall quantify baseline emissions from each electric standby equipped TRU following the calculation methodology in Appendix B (Calculations for Determining Emission Reductions from Each Electric Standby Equipped TRU).
- c. **Quantification of Emission Reductions:**
  - (1) The regulatory generator shall:
    - (a) Quantify the amount of emission reductions from each electric standby equipped TRU following the calculation methodology in Appendix B (Calculations for Determining Emission Reductions from Each Electric Standby Equipped TRU).
    - (b) Calculate the amount of emission reductions as rounded down to the nearest one tenth (1/10) of a ton.
  - (2) Calculations shall not include emission reductions created or used under any other emissions trading program or emission reductions used to satisfy the State Implementation Plan including transportation conformity requirements, emission reductions funded by the Diesel Emissions Reduction Act, or any emission reductions pursuant to a federal consent decree, or state and local settlements.

**304.2** Shall comply with all of the following operating, monitoring, recordkeeping, and maintenance requirements:

- a. **Electric Standby Equipped TRU Operation and Maintenance:** Electric standby equipped TRUs shall be operated and maintained in accordance with the manufacturer's written instructions in order to ensure the continued generation of emission reductions.
- b. **Emission Reduction Monitoring:** The regulatory generator shall monitor the continued generation of emission reductions by utilizing tamper-proof data acquisition systems installed on each TRU to quantify:
  - (1) The electric standby operation; and
  - (2) The associated electricity consumption.
  - (3) All monitoring equipment shall be operated and maintained in accordance with the manufacturer's written instructions.
- c. **Recordkeeping:** A regulatory generator is responsible for creating and maintaining records from the emission reduction monitoring as required in:
  - (1) Section 501 (Recordkeeping and Records Retention);
  - (2) Section 502 (Inspections); and
  - (3) Section 504 (Transport Refrigeration Unit (TRU) Records).

**305 ONSITE EQUIPMENT:** A regulatory generator that owns a fleet of onsite equipment and electrifies all or part of the fleet to reduce emissions:

**305.1** May apply to certify ERCs by meeting the following requirements:

- a. **Location:** The electrified onsite equipment used to generate credits shall be part of the same fleet and operated at the same location within a nonattainment area located within the jurisdiction of the MCAQD.
- b. **Quantification of Baseline Emissions:** The regulatory generator shall quantify baseline emissions for each piece of onsite equipment following the calculation methodology in Appendix C (Calculations for Determining Emission Reductions from Each Piece of Onsite Equipment).
- c. **Quantification of Emission Reductions:**
  - (1) The regulatory generator shall:
    - (a) Quantify the amount of emission reductions for each piece of onsite equipment following the calculation methodology in Appendix C (Calculations for Determining Emission Reductions from Each Piece of Onsite Equipment).
    - (b) Calculate the amount of emission reductions as rounded down to the nearest one tenth (1/10) of a ton.
  - (2) Calculations shall not include emission reductions created or used under any other emissions trading program, emission reductions used to satisfy the State Implementation Plan including transportation conformity requirements, or any emission reductions pursuant to a federal consent decree, or state and local settlements.

**305.2** Shall comply with all of the following operating, monitoring, repowering, removal/disposal, recordkeeping, and maintenance requirements:

- a. **Electrified Onsite Equipment Operation and Maintenance:** Electrified onsite equipment shall be operated and maintained in accordance with the manufacturer's written instructions in order to ensure the continued generation of emission reductions.
- b. **Monitoring of Equipment Use:** The regulatory generator shall monitor the use of all electrified equipment used to generate credits and all diesel and gasoline powered equipment used for the same purpose as the electrified equipment to verify that the electrified equipment is operated in the same manner as was represented in the emission reduction credit application. All monitoring equipment shall be operated and maintained in accordance with the manufacturer's written instructions.
- c. **Repowering of Equipment to Electric:** Repowering equipment by converting a diesel or gasoline engine to an electric powered engine shall:
  - (1) Be permanent.
  - (2) Be repowered to only operate electrically.
- d. **Removal/Disposal of Replaced Equipment:** Permanently remove any replaced diesel and or gasoline powered onsite equipment and engines from the nonattainment area or render the replaced equipment permanently disabled and dispose of in a manner that complies with all applicable local, state, and federal laws. The regulatory generator shall provide evidence of proper disposal upon

request from the Control Officer or from the permitted source using the ERCs as offsets.

- e. **Recordkeeping:** A regulatory generator is responsible for creating and maintaining records from the emission reduction monitoring as required in:
  - (1) Section 501 (Recordkeeping and Records Retention);
  - (2) Section 502 (Inspections); and
  - (3) Section 505 (Onsite Equipment Records).

**306 REGISTRATION OF CERTIFIED CREDITS IN THE ARIZONA EMISSIONS**

**BANK:** The owner or operator of a permitted generator or a regulatory generator may register certified credits with the Arizona Emissions Bank. To register a certified credit:

**306.1 Owner or Operator:** The owner or operator of a permitted generator or regulatory generator shall:

- a. Indicate on the MCAQD emission reduction credit application their plan to register the certified credits in the Arizona Emission Bank; and
- b. Open an Arizona Emissions Bank account per A.A.C. R18-2-1206.A.

**306.2 Control Officer:** The Control Officer shall notify the ADEQ of the number of certified credits issued to the permitted generator or regulatory generator on a form prescribed by the ADEQ.

**307 USE OF THE CERTIFIED CREDITS:**

**307.1 Certified Credits Registered in the Arizona Emissions Bank:**

- a. An account holder who intends to use the certified credits held in its account as offsets shall file an application to use the certified credits on the form prescribed by the ADEQ.
- b. On approval of the application, the ADEQ shall:
  - (1) Issue a certificate to the account holder representing the number of certified credits that may be included in the permit or permit revision application of the stationary source;
  - (2) Notify the Control Officer of the issuance of the certificate; and
  - (3) Change the status of the certified credits to use approved.
- c. The Control Officer shall provide notice to the ADEQ of the final action on the stationary source's application for a permit or for a permit revision.
- d. Reductions in qualifying emissions reflected in the number of certified credits shall be implemented before actual construction of the new stationary source or modification begins.

**307.2 Certified Credits Not Registered in the Arizona Emissions Bank:**

- a. The owner or operator of a stationary source who intends to use certified credits that are not registered in the Arizona Emissions Bank as offsets shall:

- (1) Notify the MCAQD of the intention to use the certified credits as an offset to meet emission limits; and
  - (2) Submit the certificate of issued certified credits to the MCAQD in conjunction with a stationary source permit application or permit revision.
- b. The Control Officer shall either:
- (1) Approve the use of the certified credits as offsets and:
    - (a) Notify the owner or operator of the number of certified credits that may be included in the permit or permit revision application of the stationary source; and
    - (b) If there are any remaining available certified credits, the Control Officer will reissue the certificate with a sequential revision number. This will provide documentation on the availability of the remaining certified credits.
  - (2) Deny the use of use of the certified credits for offsets and:
    - (a) Provide written notification of the reason for denying the use of the certified credits as offsets; and
    - (b) Return the certificate of issued certified credits to the owner or operator of the stationary source.

**307.3 Maintaining Surplus Integrity Criteria:** In order to maintain the surplus integrity criteria, the Control Officer may revise the amount of previously issued certified credits at the time of the credit's use.

## **SECTION 400 – ADMINISTRATIVE REQUIREMENTS**

### **401 OFFSET INTEGRITY RESPONSIBILITIES:**

- 401.1** Every six (6) months, a permitted source that uses certified credits from a regulatory generator as offsets shall:
- a. Obtain copies of the records from the regulatory generator required under Section 500 (Monitoring and Records).
  - b. Ensure the records correspond to the semi-annual compliance reporting time frame required by the permit holder's Title V Air Quality Operating Permit.
  - c. Review the records to verify that the emission reductions generated by the regulatory generator equal the amount of certified credits used as offsets for the permitted source.
  - d. Include the regulatory generator records in the semi-annual report.
- 401.2** Every six (6) months, a permitted source that uses certified credits from a plan generator as offsets shall:
- a. Obtain copies of the records the plan generator is required to maintain per the Arizona State Implementation Plan.
  - b. Ensure the records correspond to the semi-annual compliance reporting time

frame required by the permit holder's Title V Air Quality Operating Permit.

- c. Review the records to verify that the emission reductions generated by the plan generator equal the amount of certified credits issued by ADEQ for use as offsets.
- d. Include the plan generator records in the semi-annual report.

#### **401.3 Offset Shortage:**

- a. If a permitted source determines emission reductions being generated by the regulatory generator or plan generator are less than the amount of certified credits the permitted source used to obtain their New Source Review (NSR) permit, the permitted source shall:
  - (1) Notify the Control Officer by phone within 24 hours of the discovery.
  - (2) Submit written notice:
    - (a) Within 72 hours from the date of discovery documenting the shortage of emission reductions to the Control Officer. The written notice may be submitted by mail, email, facsimile, commercial delivery, or hand delivery.
    - (b) To include:
      - (i) A description of the shortage of emission reductions.
      - (ii) Steps taken to mitigate the emissions to compensate for the shortage of emission reductions.
  - (3) Within 72 hours from the date of discovery, limit operations to compensate for the shortage in emission reductions.
  - (4) Compensate for the ongoing shortage of emission reductions by submitting a permit application within 90 days that meets one of the following:
    - (a) Limits emissions.
    - (b) Provides replacement offsets.
    - (c) Is a combination of (a) and (b).
- b. A permitted source that operates without adequate offsets is in violation of these rules.

## **SECTION 500 – MONITORING AND RECORDS**

**501 RECORDKEEPING AND RECORDS RETENTION:** Records and data required by this section shall be:

- 501.1** Kept on site at all times by the generator in a consistent and complete manner, in either electronic or paper format.
- 501.2** Made available upon request and without delay to the owner or operator of the permitted source utilizing the certified credits and the Control Officer or his designee.
- 501.3** Maintained for five (5) years beyond the use or retirement of the credit.

**502 INSPECTIONS:** A generator shall provide the Control Officer with access to the premises for the purpose of conducting an inspection to verify compliance with this rule. An inspection may include, but is not limited to, a review of records and reports.

**503 TRUCK STOP ELECTRIFICATION (TSE) RECORDS:** A regulatory generator shall maintain the following records:

**503.1 Inventory Records:** A detailed inventory of fleet trucks used to generate credits shall include all of the following:

- a. For each fleet truck utilizing the private truck stop provide:
  - (1) Fleet identification number.
  - (2) The truck manufacturer.
  - (3) Truck model.
  - (4) Truck model year.
- b. Information on sources used to obtain idling speed, idling emission rate, or fuel use rate for each truck engine when used to calculate emission reduction credits.
- c. The date each truck was:
  - (1) Added to the inventory.
  - (2) Removed from the inventory.
- d. **Monthly:** The regulatory generator shall review and, if necessary, update the equipment inventory.

**503.2 Operational Records:**

- a. **Daily:** The regulatory generator shall record the number of hours, as rounded to the nearest quarter hour, the idle reduction technology is used for each electrified parking space using TSE-based dataloggers for recording truck plug-in and TSE runtime.
- b. **Monthly:** The regulatory generator shall record all of the following for each calendar month:
  - (1) The number and availability of electrified truck stop spaces.
  - (2) Dates and description of maintenance and repairs to the idle reduction technology conducted at each electrified truck space.
  - (3) An electricity consumption record for each electrified truck space.

**503.3 Emission Reductions Records:** Within fifteen (15) days of the end of each month, the regulatory generator shall:

- a. Calculate the amount of emission reductions generated from each electrified truck space during the preceding month using the methodology in Appendix A (Calculations for Determining Emission Reductions from Each Electrified Truck Space).
- b. Calculate a rolling twelve (12) month total of emission reductions.

- c. If the rolling 12-month total is less than the amount of emission reduction credits originally certified, the regulatory generator shall, within 24 hours, notify:
  - (1) The Control Officer; and
  - (2) The permitted source relying on the certified credits as offsets.

**504 TRANSPORT REFRIGERATION UNIT (TRU) RECORDS:** A regulatory generator shall maintain the following records:

**504.1 Inventory Records:** A detailed inventory of fleet electric standby equipped truck and or trailer TRUs used to generate credits shall include all of the following:

- a. For each electric standby equipped truck and or trailer TRU used to generate credits the following:
  - (1) Fleet identification number.
  - (2) The TRU manufacturer.
  - (3) The TRU model.
  - (4) The TRU model year.
- b. The date each electric standby equipped truck and or trailer TRU was:
  - (1) Added to the inventory.
  - (2) Removed from the inventory.
- c. **Monthly:** The regulatory generator shall review and, if necessary, update the equipment inventory.

**504.2 Operational Records:**

- a. **Daily:** For each electric standby equipped TRU, the regulatory generator shall record the number of hours, as rounded to the nearest quarter of an hour, the electric standby equipped TRU utilizes electric power.
- b. **Monthly:** The regulatory generator shall record:
  - (1) The date and a description of maintenance and repairs to each:
    - (a) Electrical standby equipped TRU.
    - (b) Electric power connection.
  - (2) Electricity consumption records for each electric standby equipped TRU.

**504.3 Emission Reductions Records:** Within fifteen (15) days of the end of each month, the regulatory generator shall:

- a. Calculate the amount of emission reductions generated from each electric standby equipped TRU during the preceding month using the methodology in Appendix B (Calculations for Determining Emission Reductions from Each Electric Standby Equipped TRU).
- b. Calculate a rolling twelve (12) month total of emission reductions.

- c. If the rolling 12-month total is less than the amount of emission reduction credits originally certified, the regulatory generator shall, within 24 hours, notify:
  - (1) The Control Officer; and
  - (2) The permitted source relying on the certified credits as offsets.

**505 ONSITE EQUIPMENT RECORDS:** A regulatory generator shall maintain the following records:

**505.1 Electrified Fleet Inventory Records:** A detailed inventory of all electrified fleet onsite equipment used to generate credits shall include all of the following:

- a. For each piece of onsite equipment, provide all of the following:
  - (1) The equipment manufacturer.
  - (2) The model number.
  - (3) The model year.
  - (4) The equipment category.
  - (5) A description of the equipment.
- b. Information on sources used to obtain family or test group, fuel capacities, and emission rates of each onsite equipment engine when used to calculate emission reduction credits.
- c. The date each piece of onsite equipment was:
  - (1) Added to the inventory.
  - (2) Repowered.
  - (3) Removed from the inventory.

**505.2 Diesel and Gasoline Fleet Inventory Records:** A detailed inventory of all fleet diesel and gasoline powered onsite equipment used for the same purpose as electrified equipment that includes all of the following:

- a. For each piece of onsite equipment, provide all of the following:
  - (1) The equipment manufacturer.
  - (2) The model number.
  - (3) The model year.
  - (4) The equipment category.
  - (5) A description of the equipment.
  - (6) Fuel type.
- b. The date each piece of onsite equipment was:
  - (1) Added to the inventory.
  - (2) Repowered.
  - (3) Removed from the inventory.



**505.3 Monthly:** The regulatory generator shall review and, if necessary, update the equipment inventory.

**505.4 Operational Records:**

**a. Monthly:** For each electrified piece of onsite equipment used to generate credits, the regulatory generator shall record a description of all maintenance and repairs and at least one of the following to demonstrate the equipment is used in the same manner as was represented in the emission reduction credit application:

(1) Hours of operation.

(2) Mileage accrued.

(3) Electricity consumed.

**b. Monthly:** For each piece of conventionally-fueled onsite equipment that can be used for the same purpose as the electrified piece of equipment used to generate credits, the regulatory generator shall record a description of all maintenance and repairs and at least one of the following:

(1) Hours of operation.

(2) Mileage accrued.

(3) Fuel consumed.

## APPENDIX A

### CALCULATIONS FOR DETERMINING EMISSION REDUCTIONS FROM EACH ELECTRIFIED TRUCK SPACE

- A.** Baseline Emissions = Annual Utilization (hrs) × Truck Idling Pollutant Emission Factor (g/hr)
1. Where g is grams of pollutant and hr is hour or hours.
  2. The truck idling pollutant emissions factor is the Model Year 2007 emission rate or the most recent applicable federal truck emission standard.
  3. Annual utilization is the aggregate number of hours (annual average using historical data for most recent and representative two-year period) of actual long duration idling that is directly displaced by truck stop electrification utilization for the truck type. Where available, these data shall be obtained from truck telematics or datalogging data. If such data are unavailable, the applicant shall submit data logs, records, or receipts showing length of time fleet trucks have been resident at the private truck stop location to be equipped with TSE, and the periods of time truck engines were operated at those locations.
  4. The above calculations yield gm/year. To obtain tons/yr, the regulatory quantity, multiply by  $1.1 \times 10^{-6}$ .
- B.** Post project emissions for truck stop electrification utilization (elimination of truck idling while operating on electricity) is zero. The regulatory generator shall propose a factor for TSE utilization (i.e. the proportion of eligible truck idling time that, on an annual average, will be used each electrified truck space.) This proportion will become an enforceable limit on each certified credit.
- C.** The amount of eligible emission reduction credits for each electrified truck space is determined by subtracting post project emissions from baseline emissions.

## APPENDIX B

### CALCULATIONS FOR DETERMINING EMISSION REDUCTIONS FROM EACH ELECTRIC STANDBY EQUIPPED TRU

- A.** Baseline Emissions = Rated HP × Load Factor × Annual Utilization (hrs/year) × Pollutant Emission Factor (g/hp-hr)
1. Where g is grams of pollutant, hp is horsepower, and hr is hour or hours.
  2. Pollutant emissions factor is the emission rate allowed by the federal standard currently applicable to the source category to which the TRU equipment belongs.
  3. Rated HP is the TRU engine power rating as certified by the manufacturer in meeting the currently applicable federal standard.
  4. Load factor is the unitless fraction of the engine's rated power that is utilized in performing an average annual duty cycle and is derived from actual operational data.
  5. Annual utilization is the aggregate number of hours (annual average using historical data for most recent and representative two-year period) of actual TRU utilization that is directly displaced by the use of electric standby equipped TRU and electricity from the electric power grid.
  6. The above calculations yield gm/year. To obtain tons/yr, the regulatory quantity, multiply by  $1.1 \times 10^{-6}$ .
- B.** Post project emissions for all-electric equipment is zero.
- C.** The amount of eligible emissions reductions credits for each TRU is determined by subtracting post project emissions from baseline emissions.

## APPENDIX C

### CALCULATIONS FOR DETERMINING EMISSION REDUCTIONS FROM EACH PIECE OF ONSITE EQUIPMENT

- A.** Baseline Emissions = Rated HP × Load Factor × Annual Utilization (hrs/year) × Pollutant Emission Factor (g/hp-hr)
1. Where g is grams of pollutant, hp is horsepower, and hr is hour or hours.
  2. Pollutant emissions factor is the emission rate allowed by the federal standard currently applicable to the source category to which the equipment belongs.
  3. Rated HP is the onsite equipment engine power rating as certified by the manufacturer in meeting the currently applicable federal standard.
  4. Load factor is the unitless fraction of the engine's rated power that is utilized in performing an average annual duty cycle and is derived from the last two years of actual operational data.
  5. Annual utilization is the aggregate number of hours (annual average using historical data for the most recent and representative two-year period) of actual onsite equipment utilization.
  6. The above calculations yield gm/year. To obtain tons/yr, the regulatory quantity, multiply by  $1.1 \times 10^{-6}$ .
- B.** Post project emissions for all-electric equipment is zero.
- C.** The amount of eligible emission reduction credits for each electrified piece of onsite equipment is determined by subtracting post project emissions from baseline emissions.