NOTICE OF FINAL RULEMAKING
MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS
REGULATION II – PERMITS AND FEES

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

The Maricopa County Air Quality Department (MCAQD) revised Maricopa County Air Pollution Control Regulation II – Rule 204 (Emission Reduction Credit (ERC) Generation, Certification, and Use). The Control Officer is posting this Notice of Final Rulemaking on the MCAQD website as required by the Arizona Revised Statute (A.R.S.) § 49-471.07(G). This notice includes the preamble, as prescribed in A.R.S. § 49-471.05, and the full text of the final rule. This notice also includes a list of all previous notices posted on the Maricopa County Enhanced Regulatory Outreach Program (EROP) website addressing the proposed rule and the concise explanatory statement prescribed in A.R.S. § 49-471.07, subsection B.

PREAMBLE

1. Statutory authority for the rulemaking:
A.R.S. §§ 49-112, 49-474, 49-479, and 49-480

2. Name and address of department personnel with whom persons may communicate regarding the rulemaking:
Name: Kimberly Butler
Maricopa County Air Quality Department
Planning and Analysis Division
Address: 3800 N Central Avenue, Suite 1400
Phoenix, AZ 85012
Telephone: 602-506-6010
Fax: 602-506-6179
Email: AQPlanning@maricopa.gov
Submit Comments At: http://maricopa.gov/FormCenter/Regulatory-Outreach-17/Citizen-Comments-94

3. Rulemaking process:
This rulemaking followed procedures identified in state statutes and the Maricopa County EROP Policy.
County Manager Briefing: December 2017
Stakeholder Workshops: September 27, 2018
Board of Health Meeting to Initiate Regulatory Change: February 25, 2019
Notice of Proposed Rulemaking: August 21, 2019
Board of Health Meeting to Recommend Approval to the Board of Supervisors: October 28, 2019
4. **Explanation of the rule, including the control officer's reasons for initiating the rulemaking:**

**Summary**

Rule 204 implements procedures for the generation, certification, and utilization of emission reduction credits (ERCs) generated by permitted sources and, through the recent adoption of the revisions to Rule 204, also implements procedures for the generation, certification, and utilization of ERCs generated by three categories of nonpermitted sources. Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204. Sources may submit an application to the MCAQD for the certification of ERCs that are generated within a nonattainment area within Maricopa County. Certified credits may be deposited into the Arizona Emissions Bank until they are sold, used, or retired. The Arizona Department of Environmental Quality (ADEQ) administers the Arizona Emissions Bank, as specified in A.R.S. § 49-410 and Arizona Administrative Code (A.A.C) Title 18, Chapter 2, Article 12.

In 2017, the Arizona State Legislature amended A.R.S. § 49-410 to allow for the generation, certification, and utilization of ERCs from nontraditional (non-permitted) sources. ADEQ followed with a revision to the A.A.C. on June 14, 2019, as published in the Arizona Administrative Register (A.A.R.) at 25 A.A.R. 1433. The MCAQD revised Rule 204 to include provisions for the generation, certification, and utilization of emission reduction credits from nontraditional sources that use private truck stop electrification, electric standby equipped transport refrigeration units, and electrified onsite equipment to generate emission reduction credits. The MCAQD also made revisions to align the rule with the revisions made to the Arizona Emissions Bank rules by the ADEQ.

**Background**

The federal Clean Air Act’s (CAA) New Source Review (NSR) program requires the owner or operator proposing to construct a new major source or proposing to construct a major modification of an existing major source in a nonattainment area to obtain emission offsets before the proposed project may commence. The purpose of requiring emission offsets is to allow a nonattainment area to move towards attainment of the National Ambient Air Quality Standards (NAAQS) while still allowing for industrial growth in that area.

An emission offset is a reduction in the emissions of a pollutant from one emission source in a nonattainment area to compensate for an emissions increase of that same pollutant from another emission source in the nonattainment area. Emission reductions used as emission offsets must equal or exceed emission increases from a proposed new or modified major source in a nonattainment area. The amount of emission reductions required depends on the pollutant and the classification of the nonattainment area associated with that pollutant.

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1 Although Rule 204 has been revised locally to allow for the generation, certification, and utilization of ERCs from three categories of nonpermitted sources of ERCs, the generation, certification, and utilization of ERCs from these three source categories will not be permitted until the U.S. Environmental Protection Agency (EPA) approves the rule into the Arizona State Implementation Plan.
New or expanding sources in a nonattainment area commonly meet the offset requirement by adding emission controls to a process, replacing equipment, closing a facility, or purchasing ERCs. An ERC is a credit earned by a company by reducing emissions beyond what is required by law or by shutting down a facility. ERCs must be certified to be permanent, enforceable, real, surplus, and quantifiable.

Maricopa County is currently designated as a nonattainment area for both the 2008 8-hour ozone NAAQS and the 2015 8-hour ozone NAAQS. It is classified as a moderate nonattainment area for the 2008 8-hour ozone NAAQS and as a marginal nonattainment area for the 2015 ozone 8-hour NAAQS. In ozone nonattainment areas, an owner or operator proposing to construct a new major source or proposing to construct a major modification of an existing major source must obtain emission offsets that exceed emission increases from the proposed project before the project may commence. In the case of an ozone moderate nonattainment area, such as Maricopa County, an owner or operator proposing to construct a new major source or proposing to construct a major modification of an existing major source must obtain 1.15 tons of emission offsets for every 1.0 ton of proposed emission increases from the project.

Recently, several inquiries have been made for expanding existing major sources or locating new major sources in Maricopa County. Unfortunately, many of the sources interested in expanding or locating new major sources in Maricopa County have not been able to obtain enough offsets through traditional methods. As a result, industrial growth for certain major sources in Maricopa County has halted.

**Challenge: Availability of Emission Reduction Credits**

A common method of obtaining emission offsets is the purchase of ERCs. Unfortunately, there is a limited amount of ERCs available in Maricopa County to allow for industrial growth in certain industries. In particular, there is a limited amount of volatile organic compound (VOC) and oxides of nitrogen (NOx) ERCs.

To accommodate future economic growth in Maricopa County while complying with federal air quality requirements, the MCAQD researched ways to increase the availability of emission offsets and determined one way to do so was to revise Rule 204 to allow for the generation, certification, and utilization of ERCs from nontraditional sources of ERCs. Previously, Rule 204 only allowed for the generation, certification, and utilization of ERCs generated from traditional, or permitted, sources. Since a majority of the County’s emissions are from nontraditional sources, a large amount of ERCs have not been generated through this manner. As a result, the MCAQD revised Rule 204 to allow for the generation, certification, and utilization of ERCs from nontraditional sources of ERCs, specifically from private truck stop electrification, electric standby equipped transport refrigeration units, and electrified onsite equipment. The generation, certification, and utilization of ERCs from these nontraditional sources is expected to increase the amount of ERCs available thereby increasing the amount of emission offsets available for major sources looking to locate or expand in Maricopa County.

Although Rule 204 has been revised locally to allow for the generation, certification, and utilization of ERCs from these nontraditional sources, the generation, certification, and utilization of ERCs from these three source categories will not be permitted until the U.S. Environmental Protection Agency (EPA) approves the rule into the Arizona State Implementation Plan.
Revisions to Rule 204

In general, the MCAQD:

- Revised the rule to align with the revisions made to the Arizona Emissions Bank rules by the ADEQ.
- Revised Section 100 (General) to clarify the purpose of the rule and expand the applicability of the rule to include nontraditional (non-permitted) sources of ERCs (regulatory generators and plan generators).
- Revised Section 200 (Definitions) to add, revise, and delete definitions to be consistent with the definitions found in A.A.C. Title 18, Chapter 2, Article 12, R18-2-1201. New definitions necessary to define new terms associated with rule language related to regulatory generators were also added.
- Revised and restructured Section 300 (Standards) to provide separate subsections describing the application, certification, registration, and utilization requirements of ERCs generated by permitted and regulatory generators.
- Added Section 400 (Administrative Requirements), subsection 401 (Offset Integrity Responsibilities) to describe the responsibilities of a permitted source using certified credits generated by a plan generator or a regulatory generator including actions that a permitted source must take if an offset shortage is discovered.
- Added Section 500 (Monitoring and Records) to describe recordkeeping and monitoring requirements a regulatory generator must comply with to demonstrate the continued generation of emission reductions and the integrity of the certified credits.
- Added Appendices A, B, and C to describe the calculations used to determine the actual emission reductions achieved by regulatory generators.

5. Studies relied on in the control officer’s evaluation of or justification for the rule and where the public may obtain or review the studies, all data underlying the studies, any analysis of the studies and other supporting material.

United States Environmental Protection Agency Region IX Air Division (2007). Technical Support Document for EPA’s Rulemaking for the Arizona State Implementation Plan Regarding Maricopa County Air Quality Department Rule 242, “Emission Offsets Generated by the Voluntary Paving of Unpaved Roads”. This document may be viewed at the Maricopa County Air Quality Department, 3800 North Central Ave., Suite 1400, Phoenix, AZ 85012.


6. An economic, small business and consumer impact statement:

The following discussion addresses each of the elements required for an economic, small business, and consumer impact statement, as prescribed by A.R.S. §§ 41-1055, subsections A, B, and C, and 41-1035:

An identification of the rulemaking, including all of the following:
This rulemaking revised Rule 204. Participation in the generation, certification, and utilization of ERCs is voluntary.

(a) **The conduct and its frequency of occurrence that the rule is designed to change.**

The MCAQD revised Rule 204 to allow for the generation, certification, and utilization of ERCs from nontraditional sources of ERCs, specifically from private truck stop electrification, electric standby equipped transport refrigeration units, and electrified onsite equipment.

(b) **The harm resulting from the conduct the rule is designed to change and the likelihood it will continue to occur if the rule is not changed.**

Currently, there is a limited amount of VOC and NOx credits available in Maricopa County. The lack of available credits adversely impacts Maricopa County’s economy by limiting the ability of certain major stationary sources to locate or expand operations within Maricopa County. If Rule 204 was not revised, the ability for certain major stationary sources to locate or expand in Maricopa County would continue to be limited.

(c) **The estimated change in frequency of the targeted conduct expected from the rule change.**

The MCAQD revised Rule 204 to allow for the generation, certification, and utilization of ERCs from nontraditional sources of ERCs, specifically from private truck stop electrification, electric standby equipped transport refrigeration units, and electrified onsite equipment.

**A brief summary of the information included in the economic, small business, and consumer impact statement.**

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204.

This rulemaking is anticipated to have an overall positive impact on Maricopa County’s economy. The generation of more ERCs by nontraditional sources will allow more large businesses wishing to construct new major sources or make major modifications to existing major sources in Maricopa County to meet the emission offset requirement of the CAA. In addition, owners or operators of private truck stops, transport refrigeration units, and onsite equipment that choose to use electricity to reduce or eliminate emissions from gasoline and diesel fueled equipment and generate ERCs will benefit by being able to sell ERCs to the large businesses needing them for emissions offsets.

**Name and address of agency employees who may be contacted to submit or request additional data on the information included in the economic, small business, and consumer impact statement.**

Name: Kimberly Butler  
Maricopa County Air Quality Department  
Planning and Analysis Division

Address: 3800 N Central Avenue, Suite 1400  
Phoenix, AZ 85012

Telephone: (602) 506-6010
An identification of the persons who will be directly affected by, bear the costs of or directly benefit from the rulemaking.

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204. Both the generator and the user of the ERCs will bear the costs and benefits from the rulemaking.

The owner or operator of a private truck stop, transport refrigeration unit, or onsite equipment that chooses to use electricity to reduce or eliminate emissions from gasoline and diesel fueled equipment will bear the costs associated with the cost to replace or add equipment necessary to use electricity instead of gasoline or diesel fuel; however, they will benefit from the ability to generate ERCs and, ultimately, sell the certified ERCs for a profit.

The owner or operator of a major stationary source needing emission offsets will bear the cost of purchasing the certified ERCs but will benefit from the ability to construct a new major stationary source in Maricopa County or make a major modification to an existing major stationary source in Maricopa County.

In addition, the citizens and visitors to Maricopa County are anticipated to benefit from this rulemaking. They will have cleaner air to breathe through the reduction of air pollutants and potentially more job opportunities through new economic growth and expansion.

A cost benefit analysis of the following:

(a) The probable costs and benefits to the implementing agency and other agencies directly affected by the implementation and enforcement of the rulemaking.

The cost incurred by MCAQD to review ERC applications and certify ERCs has been, and is expected to continue to be, minimal.

The cost to ADEQ of administering the Arizona Emissions Bank has been, and is expected to continue to be, minimal as stated in ADEQ’s Notice of Final Rulemaking (25 A.A.R. 1433, June 14, 2019).

(b) The probable costs and benefits to a political subdivision of this state directly affected by the implementation and enforcement of the rulemaking.

This rulemaking should not impose any new costs on political subdivisions of this state affected by the rulemaking.

(c) The probable costs and benefits to businesses directly affected by the rulemaking, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the rulemaking.

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204. Both the generator and the user of the ERCs will bear the costs and benefits from the rulemaking.
The owner or operator of a private truck stop, transport refrigeration unit, or onsite equipment that chooses to use electricity to reduce or eliminate emissions from gasoline and diesel fueled equipment will bear the costs associated with the cost to replace or add equipment necessary to use electricity instead of gasoline or diesel fuel; however, they will benefit from the ability to generate ERCs and, ultimately, sell the certified ERCs for a profit.

The owner or operator of a major stationary source needing emission offsets will bear the cost of purchasing the certified ERCs but will benefit from the ability to construct a new major stationary source in Maricopa County or make a major modification to an existing major stationary source in Maricopa County.

A general description of the probable impact on private and public employment in businesses, agencies, and political subdivisions of this state directly affected by the rulemaking.

The probable impact on private and public employment in businesses directly affected by the rulemaking is expected to be positive. The generation of more ERCs will allow more businesses to locate and expand in Maricopa County, thereby increasing the overall economic growth and expansion.

A statement of the probable impact of the rulemaking on small businesses. The statement shall include:

(a) An identification of the small businesses subject to the rulemaking.

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204.

The small businesses subject to Rule 204 are the owners or operators of private truck stops, transport refrigeration units, and onsite equipment who choose to use electricity to reduce or eliminate emissions from gasoline and diesel fueled equipment.

(b) The administrative and other costs required for compliance with the rulemaking.

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204.

Administrative Costs: Small business choosing to generate and certify ERCs must comply with the application and recordkeeping requirements of the rule.

Other Costs: Small business choosing to generate and certify ERCs will bear costs associated with the cost to replace or add equipment necessary to use electricity instead of gasoline or diesel fuel and the cost of any monitoring equipment required by the rule to ensure the continued generation of ERCs.

(c) A description of the methods that the agency may use to reduce the impact on small businesses.

i. Establish less stringent compliance or reporting requirements in the rule for small businesses.
Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204. The MCAQD was not aware of any less stringent compliance or reporting requirements.

**ii. Establish less stringent schedules or deadlines in the rule for compliance or reporting requirements for small businesses.**

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204. The MCAQD was not aware of any less stringent schedules or deadlines for compliance or reporting requirements.

**iii. Consolidate or simplify the rule's compliance or reporting requirements for small businesses.**

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204. The MCAQD was not aware of any way to consolidate or simplify the rule’s compliance or reporting requirements.

**iv. Establish performance standards for small businesses to replace design or operational standards in the rule.**

Participation in the generation, certification, and utilization of ERCs is voluntary; however, when a source chooses to generate, certify, or utilize ERCs they must do so in compliance with the applicable provisions of Rule 204.

**v. Exempt small businesses from any or all requirements of the rule.**

Participation in the generation, certification, and utilization of ERCs is and will remain voluntary.

**(d) The probable cost and benefit to private persons and consumers who are directly affected by the rulemaking.**

This rulemaking will not impose any costs to private persons or consumers. The citizens and visitors to Maricopa County will benefit through the reduction of air pollutants and economic growth.

**A statement of the probable effect on state revenues.**

The rulemaking will not impose increased monetary or regulatory costs on other state agencies, political subdivisions of this state, persons, or individuals so regulated. Without costs to pass through to customers, there is no projected change in consumer purchase patterns and, thus, no impact on state revenues from sales taxes.

**A description of any less intrusive or less costly alternative methods of achieving the purpose of the rulemaking, including the monetizing of the costs and benefits for each option and providing the rationale for not using nonselected alternatives.**

The MCAQD was not aware of any less intrusive or costly methods to achieve the purpose of this rulemaking.
A description of any data on which a rule is based with a detailed explanation of how the data was obtained and why the data is acceptable data.

See Section #5 of this notice.

7. **The effective date of the rule:**

The effective date of this rulemaking was December 11, 2019.

8. **Such other matters as are prescribed by statute and that are applicable to the county or to any specific rule or class of rules:**

Under A.R.S. § 49-479(C), a county may not adopt a rule or ordinance that is more stringent than the rules adopted by the Director of the Arizona Department of Environmental Quality (ADEQ) for similar sources unless it demonstrates compliance with the applicable requirements of A.R.S. §49-112.

The MCAQD is in compliance with A.R.S. §§ 49-112(A) and (B). This rulemaking did not make the rule more stringent than the rules adopted by the Director of ADEQ.

9. **List of all previous notices posted to the Maricopa County EROP website addressing the rule and a concise explanatory statement, as prescribed by A.R.S. § 49-471.07, subsection B:**

(a) **List of all previous notices posted to the Maricopa County EROP website addressing the rule:**

<table>
<thead>
<tr>
<th>Notice Type</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briefing Notification to County Manager:</td>
<td>January 26, 2018</td>
</tr>
<tr>
<td>Notice of Stakeholder Workshop:</td>
<td>September 13, 2018</td>
</tr>
<tr>
<td>Notice of Board of Health Meeting to Initiate Regulatory Change:</td>
<td>June 28, 2019</td>
</tr>
<tr>
<td>Notice of Proposed Rulemaking:</td>
<td>August 21, 2019</td>
</tr>
<tr>
<td>Notice of Board of Health Meeting to Make Recommendation to the Board of Supervisors:</td>
<td>October 14, 2019</td>
</tr>
<tr>
<td>Notice of Board of Supervisors’s Meeting to Hold a Public Hearing:</td>
<td>November 6, 2019</td>
</tr>
</tbody>
</table>

(b) **The following discussion addresses each of the elements required for a concise explanatory statement, as prescribed by A.R.S. § 49-471.07, subsection B:**

   i. **A description of any change between the proposed rule or ordinance, the final rule or ordinance, or notice of final supplemental rule or ordinance.**

   The following changes were made after the Notice of Proposed Rulemaking was published on August 21, 2019. Changes one through fifteen were made in response to comments the MCAQD received from the EPA on October 7, 2019.

   1. Revised the definition of “emission reduction credit” to clarify that ERCs do not have property rights associated with them. The section now reads as follows:

   Section 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.

2. Revised the definition of “plan generator” to clarify that the emission reduction plan for a plan generator must be approved into the Arizona SIP. The section now reads as follows:

Section 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.

3. Modified the definition of “truck stop electrification” to include terms that are interchangeable. The section now reads as follows:

Section 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.

4. Added the terms “operating and utilization” to Section 303.2. The section now reads as follows:

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

5. Added a subsection under Section 303.2 relating to idle reduction technology operation and use; and adjusted the lettering under Section 303.2 as a result of the added subsection. The section reads as follows:

Section 303.2.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.

6. Added a requirement under the Emission Reduction Monitoring section under Section 303.2. The requirement reads as follows:

Section 303.2.b.3: All monitoring equipment shall be operated and maintained in accordance with the manufacturer’s written instructions.

7. Added the term “operating” to Section 304.2. The section now reads as follows:

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

8. Added a subsection under Section 304.2 relating to electric standby equipped TRU operation and maintenance; and adjusted the lettering under Section 304.2 as a result of the added subsection. The section reads as follows:
Section 304.2.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.

9. Added a requirement under Emission Reduction Monitoring under Section
304.2. The requirement reads as follows:
Section 304.2.b.3: All monitoring equipment shall be operated and maintained in
accordance with the manufacturer’s written instructions.

10. Added the term “operating” to Section 305.2. The section now reads as follows:
Section 305.2: Shall comply with all of the following operating, monitoring,
repowering, removal/disposal, recordkeeping, and maintenance requirements:

11. Added a subsection under Section 305.2 relating to electrified onsite equipment
operation and maintenance; and adjusted the lettering under Section 305.2 as a
result of the added subsection. The section reads as follows:
Section 305.2.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.

12. Added a second sentence to the Monitoring of Equipment Use section under
Section 305.2. The sentence reads as follows:
All monitoring equipment shall be operated and maintained in accordance with
the manufacturer’s written instructions.

13. Removed the phrase “for a minimum of thirty (30) years” from Section 303.2.c.

14. Removed Sections 304.2.c and 305.2.e.

15. Added Section 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.

16. Section 501.3 added numeric value after “five” to read “five (5).”

17. Section 505.1.c(2) “Removed from the inventory” was renumbered to 505.1.c(3).

ii. A summary of the comments and arguments for and against the notice and
the county’s response to the comments and arguments.

The following discussion evaluates the arguments for and against the rule and
includes responses to comments received on the rule or the preamble in the Notice
of Proposed Rulemaking. The MCAQD received written comments from one
stakeholder and one formal comment from the EPA. All of the comments were
reviewed and evaluated by the MCAQD.

Comment 1: We are requesting a more inclusive definition of ineligible emission
reductions in Section 305.1(c). The Federal Aviation Administration’s
VALE program earmarks specific emissions reduction actions as
credits toward future airport projects. VALE is described as an
“incentive-based emissions reduction program” and we are
requesting these earmarked emissions reductions be clearly listed as ineligible under this program.

Response 1: Rule 204, Section 305.1.c(2) language excludes “…emission reductions created or used under any other emissions trading program…” from the calculations to quantify emission reductions. This exclusion would include any emission reductions created under the Federal Aviation Administration’s (FAA) Voluntary Airport Low Emission Program (VALE) program. In addition, emission reduction credits generated through the FAA VALE grants are totally under the control of the airport and/or FAA. Therefore, future use would be at the discretion of the airport and/or the FAA.

Comment 2: Electrification of fuel-driven equipment can result in operational changes of the mobile equipment included in this rulemaking. An example is the running of conveyor belts on aircraft baggage loaders, which once electrified, will run solely off the battery and not register as “hours of operation” of the drivetrain. Pre-electrification, the motor on these units would have been running to power the conveyor belts and registering as “operating”. The commenter is unsure how this possible reduction in hours of operation, while performing the same duties as the units replaced, will be handled in the program.

Response 2: Rule 204, Section 505.4 (Operational Records) rule language was revised to provide three options for documenting the use of the electrical equipment: hours of operation, mileage accrued, and the amount of electricity consumed. For the gasoline or diesel fueled equipment, the options include: hours of operation, mileage accrued, and fuel consumption. During the application process, the applicant will identify which type(s) of recordkeeping will be used to verify that the electrical equipment is operated in the same manner as the gasoline or diesel fueled equipment it replaced in order to verify that no load shifting is occurring.

Comment 3: Rule 204, Section 305.2(b) does not allow for the retrofit of the equipment from fuel-powered to electricity-driven. We request the inclusion of an option to “repowering to electric” in this section as an allowable replacement practice.

Response 3: Section 305.2 was revised to allow for the repowering of gasoline or diesel fueled equipment as long as it is repowered to operate only on electrical power. The electrified onsite equipment recordkeeping requirements in Section 505.1.c was revised to include for the repowering of equipment.

Comment 4: Draft Rule 204, Section 505.4 Operational Records requires record keeping of both mileage and hours of operation for both the zero emissions equipment and the gasoline or diesel fueled equipment within the fleet. For the equipment in this rulemaking, we suggest that hours of operation is the appropriate metric.
Response 4: Rule 204, Section 505.4.a was revised to require “at least one” of the listed methods be used to demonstrate the electric powered equipment is being used in the same manner as was represented in the emission reduction credit application. Section 505.4.b was also revised to require “at least one” of the listed methods be used to meet operational recordkeeping requirements.

Comment 5: The required emissions reduction commitment of 30 years seems daunting. With that requirement, the company contemplating the emissions reduction is attempting to project their business plan and any technological improvements that might happen within that timeframe. An opportunity to commit to a lesser timeframe seems more appropriate for this type of equipment. Likewise, by fully crediting the replaced equipment emissions reduction now, and allowing industry to use them for permit compliance for the next 30 years, the County is “losing” the benefits of more stringent air emissions standards being promulgated over time on these types of equipment.

Response 5: The thirty (30) year requirement was removed as a requirement. The MCAQD will rely on the definition of permanent when determining if an emission reduction meets the permanence criteria as required by the CAA. Section 214 defines “permanent” as “reductions in qualifying emissions that are enforceable and enduring for the duration of federal major new source review obligations.”

Comment 6: See Attachment 1.

Response 6: The MCAQD provides the following response to EPA’s comments. First, the MCAQD acknowledges and appreciates the engagement between the MCAQD and EPA staff during the Rule 204 rulemaking. The MCAQD carefully considered all of EPA’s comments during the rulemaking process and incorporated many of EPA’s comments into Rule 204.

Second, the MCAQD respectively disagrees with the EPA that the revisions associated with the generation of ERCs from nontraditional sources do not fully satisfy all Clean Air Act statutory and regulatory requirements. The MCAQD believes these provisions do fully satisfy all Clean Air Act and regulatory requirements and will demonstrate how they satisfy these requirements in the MCAQD SIP submittal.

Finally, because the MCAQD believes the provisions in Rule 204 satisfy all Clean Air Act and regulatory requirements the MCAQD did not delay the approval of Rule 204. Revisions to the rule were adopted on December 11, 2019.

EXACT WORDING OF THE RULES
MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION II – PERMITS AND FEES

RULE 204
EMISSION REDUCTION CREDITS CREDIT (ERC) GENERATION, CERTIFICATION, AND USE FOR USE WITH THE ARIZONA EMISSIONS BANK

INDEX

SECTION 100 – GENERAL
  101 PURPOSE
  102 APPLICABILITY

SECTION 200 – DEFINITIONS
  201 ACCOUNT HOLDER
  202 ARIZONA EMISSIONS BANK
  203 BASELINE EMISSIONS
  204 CERTIFIED CREDIT
  205 CREDIT UTILIZATION
  206 ELECTRIC STANDBY EQUIPPED TRUCK
  207 EMission REDUCTION CREDIt (ERC) or CREDIT
  208 EMISIONS BANK
  209 ENFORCEABLE
  210 GENERATOR
  211 IDLE REDUCTION TECHNOLOGY
  212 LONG DURATION IDLING
  213 OFFSET-CREATION RULE
  214 OFFSETS
  215 ONSITE EQUIPMENT
  216 PERMANENT
  217 PERMITTED GENERATOR
  218 PRIVATE TRUCK STOP
  219 QUALIFYING EMISSIONS
  219 QUANTIFIABLE
SECTION 300 – STANDARDS

301 CREDIT CERTIFICATION
302 CREDIT UTILIZATION
301 CERTIFICATION OF CREDITS FOR EMISSION REDUCTIONS BY A PERMITTED GENERATOR
302 CERTIFICATION OF CREDITS FOR EMISSION REDUCTIONS BY A REGULATORY GENERATOR
303 TRUCK STOP ELECTRIFICATION (TSE)
304 TRANSPORT REFRIGERATION UNIT (TRU)
305 ONSITE EQUIPMENT
306 REGISTRATION OF CERTIFIED CREDITS IN THE ARIZONA EMISSIONS BANK
307 USE OF THE CERTIFIED CREDITS

SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)

401 OFFSET INTEGRITY RESPONSIBILITIES

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

501 RECORDKEEPING AND RECORDS RETENTION
502 INSPECTIONS
503 TRUCK STOP ELECTRIFICATION (TSE) RECORDS
504 TRANSPORT REFRIGERATION UNIT (TRU) RECORDS
505 ONSITE EQUIPMENT RECORDS

APPENDICES TO RULE 204

APPENDIX A: CALCULATIONS FOR DETERMINING EMISSION REDUCTIONS FROM EACH ELECTRIFIED TRUCK SPACE
APPENDIX B: CALCULATIONS FOR DETERMINING EMISSION REDUCTIONS FROM EACH ELECTRIC STANDBY EQUIPPED TRU
APPENDIX C: CALCULATIONS FOR DETERMINING EMISSION REDUCTIONS FROM EACH PIECE OF ONSITE EQUIPMENT
SECTION 100 – GENERAL

101 PURPOSE: To implement procedures for certification and utilization of emission reduction credits for use with the Arizona Emissions Bank. 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: Participation in the Rule 204 emission reduction credit certification and utilization program is voluntary. The provisions of this rule apply to permitted sources emitting particulate matter, sulfur dioxide, carbon monoxide, nitrogen oxides, or volatile organic compounds. Rule 204 does not apply to sources granted the authority to operate under Rule 230 (General Permits) of these rules. 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. See in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules, for definitions of terms that are used but not specifically defined in this rule. In the event of any inconsistency between any of the Maricopa County Air Pollution Control Regulations, the definitions in this rule take precedence.
 ACCOUNT HOLDER: Any person or entity who has opened an account with the Arizona Emissions Bank.

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.

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 calendars years, or two calendar years more representative of normal emissions within the 5-year period immediately before the emissions reduction is achieved.

CERTIFIED CREDITS CREDIT: emission reduction credits that have qualified for certification by satisfying the criteria established for emission reduction as outlined in Section 301 (Credit Certification) of this rule. An ERC that has met the criteria in this rule for certification and has been issued by the Maricopa County Air Quality Department (MCAQD).

CREDIT UTILIZATION—the use of a certified emission reduction credit.

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.

EMISSION REDUCTION CREDIT (ERC) or CREDIT—a certified unit that may be banked, sold, transferred, withdrawn or retired. 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.

EMISSIONS BANK—the electronic entity where emission reduction credits are recorded for the purpose of the public notice, allowing a person to determine the availability of credits for related market transactions. The emissions bank is administered by the Arizona Department of Environmental Quality.

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.

GENERATOR: Any permitted source or other activity that has made or proposes to make reductions in qualifying emissions.

IDLE REDUCTION TECHNOLOGY: A technology or device that reduces the need for long duration idling.
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.

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.

OFFSETS: Reductions in emissions required under Rule 240 (Federal Major New Source Review (NSR)) of these rules.

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.

PERMANENT: Reductions in qualifying emissions that are enforceable and enduring for the duration of federal major new source review obligations.

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.

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.

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.

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.

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.

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.
**REGULATORY GENERATOR:** A generator that has achieved reductions in qualifying emissions by compliance with an offset-creation rule.

**SURPLUS:** the amount of a permitted source’s emission reduction that is not required by federal, state, or local law. A reduction in qualifying emissions not otherwise required by a federally applicable requirement and not relied upon in the State Implementation Plan (SIP).

**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.

**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.

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### SECTION 300 – STANDARDS

**CREDIT CERTIFICATION**

**301.1** The Control Officer may certify an emission credit if the Control Officer verifies the credit is based on all of the following:

(a) A reduction in actual emissions that occurred after August 17, 1999;

(b) A quantifiable reduction in actual emissions;

(c) A permanent reduction in actual emissions;

(d) An enforceable reduction in actual emissions; and

(e) A surplus reduction in actual emissions occurring in addition to any other required emission reduction.

**301.2** The source must notify the Control Officer when the reduction occurs.

**301.3** In order for the emission reduction to be quantifiable under this section:

(a) The emission reduction must be quantifiable under Rule 100, § 200.86; and

(b) The reducing source shall submit documentation of any testing or monitoring that demonstrates an emission reduction.

**301.4** The Control Officer shall certify one emission reduction credit for each ton per year of particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, or volatile organic compound actually reduced.

**301.5** The Control Officer shall notify the source and the Director of the ADEQ that a credit is certified.

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**CREDIT UTILIZATION**
A source may use a certified emission reduction credit in the same nonattainment area, maintenance area, or modeling domain in which the emission reduction occurred by submitting a Credit Utilization Application (CUA) to both the Director of the ADEQ and the Control Officer, on a form prescribed by the Director of the ADEQ. The source shall submit the CUA to the Control Officer at the time the source submits an application for a permit or permit revision.

Before any emission reduction credits may be utilized, the Control Officer shall:

(a) Evaluate and verify the authenticity of the credit, and
(b) Determine that there will be no adverse impact on the air quality.

After the Control Officer completes the permitting action, the Control Officer shall submit the credit certificate to the Director of the ADEQ and notify the Director that the requirements of A.A.C. R18-2-1206 have been met.

### 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
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.
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 of 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 of 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 (NOT APPLICABLE)**

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 (NOT APPLICABLE)

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 x 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 x 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.
Each Regulatory Department is committed to providing opportunities for stakeholder input regarding the adoption and amendment of all regulatory requirements. Your input will be collected and forwarded to the appropriate department. You will receive a written response from the applicable department within two business days. We appreciate your comments and your time.

Case Number/Rule*
AQ-2017-011 Rule 204 Emission Reduction Credit for use with the Arizona Emissions Bank

Department
Air Quality

I would like to *
Express opposition

First Name* Laura
Last Name* Yannayon

Organization
Environmental Protection Agency

City* San Francisco
Zip 94105
Email* yannayon.laura@epa.gov

Phone Number* 415-972-3534

Would you like someone to contact you?
Yes
No

Comments

If applicable, attach supporting documentation associated with your comment.
Maricopa board ltr.pdf
Maricopa County Air Quality Department

Comments Regarding the Proposed Adoption of Rule 204 – Emission Reduction Credits for Use with the Arizona Emissions Bank

The United States Environmental Protection Agency (EPA), Region 9 is providing comments regarding the Maricopa County Air Quality Department (MCAQD) proposed revisions to Rule 204 – *Emission Reduction Credits for Use with the Arizona Emissions Bank*.

First, we would like to acknowledge the engagement of the MCAQD with EPA staff as both agencies work to ensure emission reduction credits (ERCs) generated under Rule 204 will meet applicable federal statutory and regulatory requirements. The cooperative work by both agencies has led to proposed revisions that have the potential to improve Rule 204.

Rule 204 largely mirrors the provisions of Arizona Department of Environmental Quality’s recently adopted ERC banking rule, however, the proposed revisions include several new provisions for generating ERCs from nontraditional sources, such as truck stop electrification, electric standby equipped transport refrigeration units, and electric onsite equipment. EPA is concerned that these proposed revisions do not fully satisfy all CAA statutory and regulatory requirements. These issues may affect EPA’s ability to approve these revisions into the Arizona State Implementation Plan (SIP). We believe additional work is necessary to ensure that revised Rule 204 will meet the integrity criteria for offsets: quantifiable, surplus to all CAA requirements, permanent, and federally enforceable.

Typically, traditional ERCs are created through voluntary actions such as shutting down emission units or installation of additional emission controls. Agencies might work with specific source categories to reduce emissions below federally required limits to generate surplus emission reductions that can be used for economic growth. We believe there may be these types of opportunities to generate ERCs in Maricopa County.

For many years, EPA has worked with various local permit authorities to develop rules that will provide ERCs from non-traditional sources. Successful programs included provisions tailored to the specific type of source category generating the ERCs to ensure the offset integrity criteria were met. Additionally, certain source categories might have greater potential for generating ERCs that can meet the offset integrity criteria. For example, options might include adding controls to rail switching yards or electrification of ground support equipment used at airports. In light of these issues, we suggest that Maricopa County consider delaying approval of the proposed revisions to Rule 204 to allow us to continue working with MCAQD staff to develop an ERC generating rule that meets all CAA requirements.

We look forward to continuing to work with Maricopa County to protect air quality. If you have any questions or concerns regarding the list of issues, please feel free to contact my staff Laura Yannayon at (415) 972-3534, or Yannayon.Laura@epa.gov.

Sincerely,

Laura Yannayon
for Gerardo C. Rios
Manager, Air Permits Office
Air and Radiation Division