

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

RULE 270: PERFORMANCE TESTS

The Maricopa County Air Quality Department (MCAQD) revised Rule 270 (Performance Tests). The Control Officer is posting this Notice of Final Rulemaking on the MCAQD website as required by 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(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: Greg Verkamp or Kimberly Butler
Maricopa County Air Quality Department
Planning and Analysis Division

Address: 301 W. Jefferson St., Suite 410
Phoenix, AZ 85003

Telephone: 602-506-6010

Fax: 602-506-6179

Email: AQPlanning@maricopa.gov

3. Rulemaking process:

This rulemaking followed procedures identified in state statutes and the Maricopa County EROP Policy.

County Manager Briefing:	June 17, 2021
Stakeholder Workshops:	September 8, 2021 February 15, 2022
Board of Health Meeting to Initiate Regulatory Change:	October 25, 2021
Notice of Proposed Rulemaking:	March 8, 2022
Board of Health Meeting to Recommend Approval to the Board of Supervisors:	April 25, 2022
Board of Supervisors Formal Meeting to Set the Public Hearing:	May 18, 2022
Board of Supervisors Public Hearing:	August 17, 2022

4. Explanation of the rule, including the control officer's reasons for initiating the rulemaking:

Rule 270 establishes performance testing requirements for owners and operators of permitted sources that are required to conduct performance tests. This rule was last revised in 1993. The purpose of this rulemaking was to update, clarify, and enhance the rule. The revisions to Rule 270 include the following:

- Added an Applicability Section
- Added a Definitions Section with the following definitions: Force Majeure, Performance Test, Start-Up (with hyphen), Startup (no hyphen), and Test Protocol
- Clarified performance test requirements in § 301.1 by updating Code of Federal Regulations references to reflect current permitting practices
- Removed outdated language including references to the Arizona Testing Manual and references to sources that do not exist in Maricopa County
- Incorporated ASTM D4840-99 “Standard Guide for Sample Chain-of-Custody Procedures” to clarify the standard guide for sample chain-of-custody procedures and clarified the chain of custody procedures shall follow ASTM D4840-99 unless alternative chain of custody procedures are approved by the Control Officer
- Clarified performance test timeframes and testing criteria
- Clarified Relative Accuracy Test Audits shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations
- Added a Notification Section to clarify requirements for notice of start-up and notice of testing
- Added a section addressing test report submission requirements
- Clarified the test report submittal timeframes for single and multiple pieces of equipment
- Added a Monitoring and Records Section

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.

Not applicable.

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(A)(B)(C), and 41-1035:

An identification of the rulemaking, including all of the following:

This rulemaking revised Rule 270.

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

Rule 270 was revised to update and enhance the rule since the rule was last revised in 1993. The majority of the revisions mirror the performance testing requirements in the Code of Federal Regulations and standard permit conditions used in Maricopa County Air Quality Permits.

(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.

Rule 270 was revised to update and enhance the rule since the rule was last revised in 1993. The majority of the revisions mirror the performance testing requirements in the Code of Federal Regulations and standard permit conditions used in Maricopa County Air Quality Permits.

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

Rule 270 was revised to update and enhance the rule since the rule was last revised in 1993. The majority of the revisions mirror the performance testing requirements in the Code of Federal Regulations and standard permit conditions used in Maricopa County Air Quality Permits.

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

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

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: Greg Verkamp or Kimberly Butler
Maricopa County Air Quality Department
Planning and Analysis Division

Address: 301 W. Jefferson St., Suite 410
Phoenix, AZ 85003

Telephone: 602-506-6010

Fax: 602-506-6179

Email: AQPlanning@maricopa.gov

An identification of the persons who will be directly affected by, bear the costs of or directly benefit from the rulemaking.

This rulemaking affects permitted sources in Maricopa County required to conduct a performance test.

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.

This rulemaking should not impose any new costs on MCAQD or on any other agencies affected by the rulemaking.

(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.

The purpose of this rulemaking was to update, clarify, and enhance the rule. MCAQD does not anticipate this rulemaking will have significant economic impacts on businesses.

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.

This rulemaking should not have any impact on private and public employment in businesses, agencies, or political subdivisions of this state.

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.

This rulemaking affects permitted sources in Maricopa County required to conduct a performance test.

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

There are no significant administrative costs required for compliance with the rulemaking.

(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.

This rulemaking does not impose any significant new compliance requirements or reporting requirements on small businesses.

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

This rulemaking does not impose any significant new compliance requirements or reporting requirements on small businesses.

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

This rulemaking does not impose any significant new compliance requirements or reporting requirements on small businesses.

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

This rulemaking does not impose any new design or operational requirements on small businesses.

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

This rulemaking does not impose any significant new requirements on small businesses.

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

This rulemaking should not result in any significant costs for private persons and consumers.

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 purpose of this rulemaking was to update, clarify and enhance Rule 270.

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.

Not applicable.

7. The effective date of the rule:

The effective date of this rulemaking was August 17, 2022.

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 for similar sources unless it demonstrates compliance with the applicable requirements of A.R.S. § 49-112.

§ 49-112 County regulation; standards

§ 49-112(A)

When authorized by law, a county may adopt a rule, ordinance or regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all of the following requirements are met:

1. The rule, ordinance or regulation is necessary to address a peculiar local condition.

2. There is credible evidence that the rule, ordinance or regulation is either;
 - (a) Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible.
 - (b) Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance or regulation is equivalent to federal statutes or regulation.
3. Any fee or tax adopted under the rule, ordinance or regulation does not exceed the reasonable costs of the county to issue and administer the permit or plan approval program.

§ 49-112(B)

When authorized by law, a county may adopt rules, ordinances or regulations in lieu of a state program that are as stringent as a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if the county demonstrates that the cost of obtaining permits or other approvals from the county will approximately equal or be less than the fee or cost of obtaining similar permits or approvals under this title or any rule adopted pursuant to this title. If the state has not adopted a fee or tax for similar permits or approvals, the county may adopt a fee when authorized by law in the rule, ordinance or regulation that does not exceed the reasonable costs of the county to issue and administer that permit or plan approval program.

MCAQD is in compliance with A.R.S. §§ 49-112(A)(B). This rulemaking did not make the rule more stringent.

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(B):

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

Notice	Date of Posting
Briefing Notification to County Manager:	July 14, 2021
Notices of Stakeholder Workshop:	August 23, 2021 February 1, 2022
Notice of Board of Health Meeting to Initiate Regulatory Change:	October 8, 2021
Notice of Proposed Rulemaking:	March 8, 2022
Notice of Board of Health Meeting to Make a Recommendation to the Board of Supervisors:	April 11, 2022
Notice of Public Hearing (continued to August 17, 2022):	May 18, 2022
Notice of Public Hearing:	July 20, 2022

(b) The following discussion addresses each of the elements required for a concise explanatory statement, as prescribed by A.R.S. § 49-471.07(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 March 8, 2022.

1. In Section 301.6(d), MCAQD removed “without good cause” and replaced it with “for reasons other than force majeure”, removed “forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the operator's control” and replaced it with “acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the permitted source”, and removed "shall" and replaced it with "may". The section reads as follows:

§ 301.6(d): If the Control Officer is present, tests may only be stopped with the Control Officer's approval. If the Control Officer is not present, tests may only be stopped for force majeure, which includes acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the permitted source. Termination of testing for reasons other than force majeure after the first test run has commenced may constitute a failure of the test.

2. MCAQD removed “test method” in portions of the rule and replaced it with “EPA method(s)” to standardize the rule.
3. MCAQD removed “source” in portions of the rule and replaced it with either “performance” or “equipment” or removed it without replacement for rule clarity. Additionally, “affected” was removed in portions of the rule and replaced with “permitted” or “equipment” for rule clarity.
4. MCAQD removed the last sentence in § 301.1 “contains the list of test methods available for emission measurement” to clarify the rule.
5. MCAQD restructured § 401 for rule clarity. The section was revised as indicated below:

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted per the requirements of this rule as required below. However, RATAs shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

6. MCAQD made additional minor grammatical revisions to improve rule clarity and standardization.
7. MCAQD revised the test report submission requirements in § 405.1 by removing the 30 day test report submittal requirement for Non-Title V sources and making all test report submittals due 45 days after completion of testing. The revised section reads as follows:

405.1 Test reports shall be submitted to MCAQD within 45 days after:

- a. The last day of testing of a single piece of equipment; or
 - b. The conclusion of testing multiple pieces of equipment with no more than 14 calendar days between tests.
- 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. MCAQD received written comments from five stakeholders. All of the comments were reviewed and evaluated by MCAQD.

Comment #1: I am a concerned citizen regarding pollution and emissions, especially since in the past there were plans to do mountainside "mining" with homes as close as 80 feet to the "mine". I would appreciate clarification as to the removal of reference to Method 9 from Rule 270, but it remains as a measurement under Rule 316 and possibly other Rules. First, visual inspection of what is being released into the air by the naked eye seems an unacceptable and antiquated method of measurement. If something can be seen, there is already too much of whatever in the air. The idea of 7% opacity, 12% opacity seems such a unscientific method for measurement of emissions or particulate matter when there are more accurate methods available. The amount of pollution in our area is unacceptable as it is. Please advise the reasoning behind Method 9 from Rule 270 and if other Rules which reference Method 9 will be changed or if not, why not. Thank you!

Response #1: Thank you for your comment. To clarify, Test Method 9 was not removed from Rule 270. Test Method 9 is found in 40 CFR (Code of Federal Regulations) 60 in Appendix A-4. MCAQD incorporated the CFR into the rule as this enables MCAQD and regulated facilities to utilize current test methods approved by the EPA and any future test methods that the EPA may approve. Rule 270 references 40 CFR 60 in Section 301.1 of Rule 270 which states:

Section 301.1 The applicable procedures and testing methods contained in 40 CFR 51, Appendix M, 40 CFR 52, Appendices D and E, 40 CFR 60, Appendices A, B, and F, 40 CFR 61, Appendix B, and 40 CFR 63, Appendix A shall be used to determine compliance with the requirements established in this rule or contained in permits issued pursuant to this rule. For a list of Promulgated Test Methods, Proposed Test Methods, Approved Alternative Methods, Conditional Test Methods, and Other Test Methods, the EPA's Air Emission Measurement Center website.

Comment #2: Section 202: Definition of Performance Test - [Our company] would like to suggest removal of relative accuracy test audit from the proposed definition of performance test. A RATA is a method to compare the CEM system performance against an independent reference method, not a test to measure the amount of a specified regulated pollutant, pollutants, or surrogates being emitted; or to demonstrate the capture efficiency of a capture system.

In some cases, as approved by the Control Officer, multiple RATA runs may be combined to meet the requirements of a performance test. In other cases (e.g. CEMS recertification), a RATA test is only fulfilling the QA/QC obligation and not used to show compliance with an emission rate or capture efficiency, and is not considered a

performance test. By including RATA in the definition, all RATA tests would be considered performance test, which is not the case and in conflict with multiple sections of the rule – such as, test methods, minimum testing requirements, and performance test timeframes. Specifically, proposed section 301.1 only includes test methods from Part 51, 52, 60, and 63, while Part 75 is not included. The exclusion of Part 75 could be interpreted to mean that a facility is always required to comply with a listed requirement anytime a RATA is completed – Even when a RATA is completed as a standalone quality assurance evaluation (e.g. RATA completed after umbilical line replacement or as a step to certify CEMS).

When cumulative RATA runs are used to show compliance, they would automatically meet the proposed definition, so the inclusion of RATA in the definition is unnecessary.

Response #2: The purpose for keeping the Relative Accuracy Test Audit (RATA) in the rule is to ensure the stack testing portion of the RATA, where EPA reference methods are utilized to measure NO_x, CO, and O₂ concentrations in the exhaust stack, meets applicable requirements. The MCAQD did revise Section 401 (Performance Test Time Frames) as shown below to clarify RATAs shall be conducted in accordance with quality assurance procedures in the applicable federal regulations.

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted on a source subject to the requirements of this rule as required below. Except RATAs shall be conducted in accordance with quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

Additionally, the MCAQD revised Section 301.1 (Performance Test Requirements) and added 40 CFR 75, Appendices A and B to clarify anytime a RATA subject to Part 75 is completed.

Comment #3: Section 204: Definition of Start-Up - [Our Company] would like to suggest the removal of the *start-up* definition from the rule.

The defined term is trying to capture two different scenarios, both create confusion. One where a newly constructed/modified unit is initially starting up and the other where a unit has been brought online after an extended period of non-operation. These scenarios are not the same thing and intuitively are not what a person reading a rule would consider a startup. Commonly, the term startup means the unit is coming back into operation after just a short period time (e.g., for the day, to fulfill operational needs, etc.) or in the case of an electric generating unit, startup may also be a mode of operation. In fact, the language of the rule includes the language start-up/startup as the newly defined term and as the common understanding. Below we breakdown the use of start-up/startup in the rule and provide additional comments.

Rule Section	Proposed Rule Language	[Our Company] Comment
Proposed Section 301.4	Operations during periods of <u>start-up</u> , shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the relevant standard during periods of <u>startup</u> , shutdown, and malfunction...	Language reflects a period of operation, not the defined term.
Proposed Section 401.2	Shall test equipment within 60 days of <u>start-up</u> ; and	Language reflects the defined term.
Proposed Section 404.1	Notice of <u>Startup</u> : the owner or operator shall notify the department in writing within 14 calendar days after the new applicable equipment has achieved the capability to operate at its <u>maximum capacity</u> .	Language reflects the defined term. Language in this section is inconsistent with the definition of start-up where there is reference to <i>maximum production rate on a sustained basis</i> versus <i>maximum capacity</i> . The existing language in section 401 also included the language, <i>maximum production rate on a sustained basis</i> .

Seemingly the definition was added to ensure equipment that is new or newly modified or recently returned to service conduct performance testing, but language within the existing rule already accomplishes this and is described in more detail below.

Existing Section 401 Language	[Our Company] Comments
Within 60 days after a source subject to the permit requirements of this rule has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after the initial start-up of such source	This language effectively captures the need to conduct performance tests on new or newly modified pieces of equipment and is consistent with Federal language. This language also automatically allows for up to 180 days versus the proposed language only allows an extension if
and at other times as may be required by the Control Officer, the owner or operator of such source shall conduct performance tests and shall furnish the Control Officer with a written report of the results of the tests.	This language effectively captures any other scenario in which the agency would like for a performance test to be conducted on a piece of equipment; including a piece of equipment that returns to service after an extended

If the definition for *start-up* remains in the rule, [Our Company] provides the

following comments.

The definition needs to be improved to clarify what an *extended period of non-operation* means and what type of notification the agency is referencing. An example of where this could be misunderstood, is a 7-day letter is provided to agency to notify them of a simple like-kind replacement and the unit for a variety pack of reasons remains offline for several months. Clearly, the agency does not intend to require additional performance testing for this piece of equipment, but the plain English reading of the definition could result in just that. [Our Company] has provided proposed language for your consideration below.

START-UP: The moment an emission unit has reached the capability to operate at its maximum production rate on a sustained basis or the moment a piece of equipment is put back into operation after an extended period of non-operation, which the department was notified and where a performance test(s) would have otherwise been conducted.

Both *startup* and start-up are used throughout the document. It may be helpful if the definition of *start-up* remains in the rule to use *start-up* each time the term is related to the defined term and use *startup* when the term is related to starting up for typical operations or in reference to a mode of operation.

Response #3: MCAQD considered your comment and did not remove the definition of start-up from the rule, however, for rule clarity, MCAQD revised the definition of start-up (with hyphen) and added a definition for startup (no hyphen) as seen below. The definition of start-up (with hyphen) applies to new units and existing units that have been placed back into operation after an extended period of non-operation that led to a missed performance test.

203 START-UP (WITH HYPHEN): The moment a new piece of equipment has reached its capability to operate at its maximum production rate; or the moment an existing piece of equipment is placed back into operation after missing its last scheduled performance test and has reached its capability to operate at its maximum production rate.

204 STARTUP (NO HYPHEN): Relates to normal operation of equipment.

As a reminder, the testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

Comment #4: Section 301.2 - [Our Company] agrees chain-of-custody adherence is valuable to appropriate sample management, but we do not believe it is necessary to include an ASTM standard within the rule. This ASTM is not required for lab certification in all cases and may create undue burden on the facilities as well as the testing companies. For example, ADHS requires labs seeking Environmental Laboratory Licensure to establish, implement and comply with a written quality assurance plan that contains information including chain-of-custody documentation procedures with no specific standard adherence required.

Response #4: MCAQD considered your comment and revised § 301.2 as follows:

301.2 The chain of custody procedures in ASTM D4840-99 “Standard Guide for Sample Chain-of-Custody Procedures” shall be followed for all performance testing unless alternative chain of custody procedures are approved by the Control Officer.

Comment #5: Section 301.5 - Language from NSPS added to section 301.5 could result in compliance issues or undue burden for units not required to comply with NSPS requirements. Because this rule will regulate units outside of Part 60 applicability, [Our Company] recommends either removing the language (facility specific requirements could be included in permit) or updating the language of 301.5a to include more flexibility. [Our Company] has provided proposed language for your consideration below.

a. Sampling ports adequate for test methods applicable to such source that meet the requirements as published in 40 CFR Part 51, 60, 61, and 63; or as specified by permit language,

Response #5: MCAQD considered your comment but determined it was not necessary to revise the language. The language in § 301.5 is from the previous version of the rule with the exception of § 301.5(a)(1) and 301.5(a)(2), however the new language is consistent with EPA reference method sampling requirements. Even though a unit may not be subject to an NSPS, performance testing requirements for sample port locations still need to meet EPA reference method 1.

Comment #6: Section 401 Performance Test Time Frames - [Our Company] would like to comment that the proposed language does not add clarity or value. Section 401.1 states, shall test equipment within 60 days of permit issuance. It is not clear what type of permit issuance would require testing – initial issuance, issuance after a modification (administrative, minor and/or major), issuance after renewal, etc.

Section 401.2 includes the defined term start-up which is also not clear, as mentioned previously in this document. Unless the definition of start-up is made clear, we believe the existing language of the rule should remain. If the agency would like to ensure units with extended outages are tested once brought back into operation, language could be added to section 401 to make that a requirement. Or, the agency could again just stick with the existing language which allowed the Control Officer to require testing at such other times it deems necessary.

Response #6: MCAQD considered your comment and revised § 401 Performance Test Time Frames as follows:

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted per the requirements of this rule as required below. However, RATAs shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

Comment #7: Section 404.2 Notice of Testing - [Our Company] would request that the agency add language to make the notification only required if test schedule is not provided in the Performance Test Protocol.

Response #7: MCAQD considered your comment and revised § 404.2 as follows:

404.2 Notice of Testing: the owner or operator shall notify MCAQD in writing at least two weeks prior to the actual date and time of each performance test unless otherwise specified in the applicable standard or permit so MCAQD may have an observer attend. A separate notice of testing is not required if the actual date and time is submitted with the test protocol.

Comment #8: Section 405 Test Report Submission - Submittal of test reports within 30 days is too aggressive and should be pushed to at least 45 days. The section should also include language to allow longer submittal timeframes as approved by the Control Officer.

Test companies take a considerable amount of time to compile information to complete a test report and often the duration is longer when multiple pieces of equipment undergo testing at a facility. Other factors impacting report turnaround time may include timeframes for required analysis, backlogs of the testing company and/or laboratories, travel time, etc. Prior to submittal to the agency, we then review the reports for any errors or missing information. We consider these submittals to be very important and if deadlines are set at 30 days, we are concerned there will not be enough time for a robust and thorough review.

[Our Company] would also like to comment that the test report submittal requirements in the proposed rule do not reflect the current guidance provided by the agency. Currently, the agency allows for test reports to be submitted within the timeframes specific by permit (e.g. 45 days), after the testing program is complete. So, if a facility conducted testing on 5 pieces of equipment over a 5-day period, the clock for test report submittal would not start until the last day of testing. The proposed language could be read to mean that reports for each individual performance test shall be submitted within the specified timeframe. So, a facility testing under the same scenario, would have the clock start for test report submittals five different times. [Our Company] does not believe this is the intention of the agency and would request the proposed language be updated to avoid confusion.

Response #8: MCAQD considered your comment and revised § 405 as seen below.

405 TEST REPORT SUBMISSION: The owner or operator shall complete and submit test reports for performance tests as follows, unless otherwise approved by the Control Officer or as specified in the permit.

405.1 Test reports shall be submitted to MCAQD within 45 days after:

- a. The last day of testing of a single piece of equipment; or
- b. The conclusion of testing multiple pieces of equipment with no more than 14 calendar days between tests.

405.2 Submit a separate test report for each piece of equipment tested.

405.3 All test reports shall be submitted in electronic format and shall provide all required information (in accordance with the test protocol review) to determine whether or not the equipment has successfully demonstrated compliance.

Comment #9: General Comments on Rule 270 - As described in further detail below, [Our Company] firmly believes that Relative Accuracy Test Audits (RATAs) and performance tests are subsets of stack tests. Therefore, [Our Company] suggests renaming Rule 270 Performance Tests to Rule 270 Stack Tests. The renaming of the rule will not change the applicability or scope of the rule but will provide clarity that RATAs are not themselves performance tests. With the change of the rule name and the proposed revisions to the definitions, provided below, references to performance testing will need to be updated to stack testing as necessary throughout the rule.

Response #9: MCAQD considered your comment and determined the rule title should remain Performance Tests as the term is used throughout Maricopa County Air Pollution Control Regulations. In addition, MCAQD revised § 401 to address concerns regarding RATAs as follows:

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted per the requirements of this rule as required below. However, RATAs shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

Comment #10: Section 202: Performance Test - [Our Company] suggests revisions to Section 202 to correctly categorize RATAs as quality assurance activities rather than performance tests. The Environmental Protection Agency's (EPA) Clean Air Act National Stack Testing Guidance defines stack testing to include RATAs and performance tests but narrows the definition of performance testing to testing which is conducted for the purpose of determining and demonstrating compliance with an applicable standard. While RATAs are a subset of stack testing and in some instances are conducted simultaneously with performance tests, even utilizing the same data, RATAs themselves are not and should not be considered performance tests.

[Our Company] understands MCAQD's desire to witness RATAs to ensure the reference method sampling system is operated in accordance with the applicable reference methods and only requests that clarification be added to the definitions to identify RATAs and performance tests as subsets of stack testing. [Our Company] proposes the following revisions to proposed Section 202 and the addition of a new definition for "Performance Test":

202 ~~PERFORMANCE STACK~~ TEST: A test, also referred to in EPA regulations as a performance or source test, or relative accuracy test audit, **that** measures the amount of a specific regulated pollutant, pollutants, or surrogates being emitted; demonstrates the capture efficiency of a capture system; or determines the

destruction or removal efficiency of a control device used to reduce emissions at facilities subject to the requirements of the Clean Air Act.

203 PERFORMANCE TEST: A stack test conducted for the purpose of determining and demonstrating compliance with an applicable standard using promulgated test methods, other test methods or procedures cited in the applicable subpart(s) or permit, or alternative test methods approved by the Control Officer.

The separation of RATAs and performance tests within the rule also provides additional clarity on the testing time frames (Section 401). Section 401 requires performance test to be conducted within either 60 days of permit issuance or 60 days of start-up, or according to the test frequency defined in the permit.

While these time frames are comparable to the time frames found in federal regulations (NSPS and NESHAP) for performance testing, they do not align with the initial certification time frames for continuous emissions monitoring systems (CEMS). For example, in accordance with 40 CFR Part 75 operators are allowed up to 720 operating hours to complete a RATA for initial certification of a CEMS. Being based on the unit's actual operation could extend the RATA deadline out past the 60-day time frames included in the rule.

Response #10: The purpose for keeping RATA in the rule is to ensure the stack testing portion of the RATA, where EPA reference methods are utilized to measure NO_x, CO, and O₂ concentrations in the exhaust stack, meets applicable requirements. To address concerns about RATA testing time frames, MCAQD revised § 401 Performance Test Time Frames as follows:

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted per the requirements of this rule as required below. However, RATAs shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

Comment #11: Section 203: Performance Test Protocol - [Our Company] suggests adding two minor clarifications to the definition of "Performance Test Protocol" as shown below:

203 ~~PERFORMANCE~~ TEST PROTOCOL: A site-specific test plan that includes information about the facility and process(es), a test program summary, the test schedule (if available), data quality objectives, and both an internal and external quality assurance (QA) program.

Response #11: MCAQD considered your comment and revised § 205 as seen below. The word performance was removed to simplify and standardize the use of the term Test Protocol throughout the rule.

205 TEST PROTOCOL: A site-specific test plan that includes information about the facility and process(es), a test program summary, the test schedule if

available, data quality objectives, and both an internal and external quality assurance (QA) program.

Comment #12: Section 204: Start-Up - [Our Company] agrees with the addition of the definition of “Start-Up” as its inclusion provides clarity to the testing and notification requirements found in subsequent sections of the Rule. Below is the definition as written in the proposed rule.

204 START-UP: The moment an emissions unit has reached the capability to operate at its maximum production rate on a sustained basis or the moment a piece of equipment is put back into operation after an extended period of non-operation of which the department was notified.

[Our Company] believes clarification on how a unit’s capability to operate at its maximum production rate is determined and who makes this determination is needed. The act of a unit operating in some capacity is not indictive of the unit’s ability to operate at its maximum production rate on a sustained basis. For an electrical generating unit, the construction contractor or unit manufacturer will require a shakedown period prior to turning over operations of the unit to the owner or operator. Testing during this shakedown period would not represent normal operations.

[Our Company] also seeks further clarification on what would be considered an “extended period of non-operation”. Electrical generating units are frequently brought offline for up to months at a time for routine maintenance outages. During these outages [Our Company] may notify MCAQD of certain projects being undertaken (e.g., a 7-day notification). [Our Company's] plain English reading of the rule would suggest that these outages could meet the definition of “Start-Up” and trigger performance testing requirements.

Response #12: MCAQD considered your comment and for rule clarity, revised the definition of Start-Up (with hyphen) and added a definition for Startup (no hyphen) as seen below. Furthermore, MCAQD removed extended period of non-operation. The start-up definition (with hyphen) is for new units and existing units that have been placed back into operation after an extended period of non-operation that led to a missed performance test.

203 START-UP (WITH HYPHEN): The moment a new piece of equipment has reached its capability to operate at its maximum production rate; or the moment an existing piece of equipment is placed back into operation after missing its last scheduled performance test and has reached its capability to operate at its maximum production rate.

204 STARTUP (NO HYPHEN): Relates to normal operation of equipment.

As a reminder, the testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days. This extension may be used to accommodate a shake-down period or other necessary equipment testing.

Comment #13: Section 301.2: Chain-of-Custody Procedures - [Our Company] requests the ability to satisfy the chain-of-custody procedures either through the

adherence to ASTM D4840-99 or by outlining a comparable chain-of-custody procedure within the approved Stack Testing Protocol.

Response #13: MCAQD considered your comment and revised § 301.2 as follows:

301.2 The chain of custody procedures in ASTM D4840-99 “Standard Guide for Sample Chain-of-Custody Procedures” shall be followed for all performance testing unless alternative chain of custody procedures are approved by the Control Officer.

Comment #14: Section 401: Performance Test Time Frames - MCAQD has included significant revisions to Section 401 of this Rule. [Our Company] agrees with the proposed revisions to Section 401 but seeks clarification on the newly added Section 401.1 and a minor editorial edit in Section 401.3.

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted on a source subject to the requirements of this rule as required below.

401.1 Shall test equipment within 60 days or permit issuance; or

401.2 Shall test equipment within 60 days of start-up; and

401.3 Shall test equipment according to the test frequency defined in the source’s permit.

The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days from the original test deadline.

[Our Company] suggests adding language to Section 401.1 to identify when a permit issuance would trigger testing. As written, it appears that any permit issuance would require testing within 60 days of said issuance.

Response #14: MCAQD considered your comment and revised § 401 Performance Test Time Frames as follows:

401 PERFORMANCE TEST TIME FRAMES: A performance test shall be conducted per the requirements of this rule as required below. However, RATAs shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

Comment #15: Section 404.2: Notice of Testing - [Our Company] requests that language be added to Section 404.2 to waive a separate testing notice when a test schedule is provided in the Stack Test Protocol. Proposed language is provided below:

404.2 Notice of Testing: the owner or operator shall notify the department in writing at least two weeks prior to the actual date and time of each performance test unless otherwise specified in the applicable standard or permit so the department

may have an observer attend. **The requirement of this section shall be deemed met if a test schedule is provided in the required Stack Test Protocol.**

Response #15: MCAQD considered your comment and revised § 404.2 as follows:

404.2 Notice of Testing: the owner or operator shall notify MCAQD in writing at least two weeks prior to the actual date and time of each performance test unless otherwise specified in the applicable standard or permit so MCAQD may have an observer attend. A separate notice of testing is not required if the actual date and time is submitted with the test protocol.

Comment #16: Section 405: Test Report Submission - [Our Company] requests that language be added to Section 405 to incorporate MCAQD's longstanding guidance for the submittal of test reports 30- or 45-days following the completion of the testing program rather than the individual tests. Additionally, [Our Company] requests language allowing for the combining of test reports for tests of similar units and reference methods.

Response #16: MCAQD considered your comment and revised § 405 as seen below.

405 TEST REPORT SUBMISSION: The owner or operator shall complete and submit test reports for performance tests as follows, unless otherwise approved by the Control Officer or as specified in the permit.

405.1 Test reports shall be submitted to MCAQD within 45 days after:

- a. The last day of testing of a single piece of equipment; or
- b. The conclusion of testing multiple pieces of equipment with no more than 14 calendar days between tests.

405.2 Submit a separate test report for each piece of equipment tested.

405.3 All test reports shall be submitted in electronic format and shall provide all required information (in accordance with the test protocol review) to determine whether or not the equipment has successfully demonstrated compliance.

Comment #17: [Our Company] requests a change to draft section 301.6a concerning test run duration. Applicable standards, such as NSPS Subpart KKKK, and test methods, such as EPA Reference Method 20, have specific duration requirements for test runs which are less burdensome than the proposed language of 1-hour test runs. [Our Company] is concerned that for future performance tests, [Our Company] will be held to 1-hour test runs as written in draft section 301.6a, even though the applicable standard allows a shorter test run duration.

Due to the size of [Our Company's] turbines and the nature of [Our Company's] heat and power requirements, [Our Company] has difficulty maintaining the expansion turbines at high loads for the entire test duration. This can be onerous, especially if [Our Company] must conduct test runs three times greater than the applicable standard.

NSPS Subpart KKKK – Standards of Performance for Stationary Combustion Turbine went through extensive public comment, input, and analysis by EPA and the

regulated industry, which included the development of test run durations. Additionally, EPA Reference Method 20 is the test method specifically developed for combustion turbines and is one of the few methods for a specific type of equipment. Both EPA Reference Method 20 and NSPS Subpart KKKK have specific language on test run length.

If MCAQD retains the draft rule language, [Our Company] would appreciate clarification or comment that test run durations of less than one hour are acceptable as specified within the applicable standards.

Response #17: MCAQD considered your comment concerning test run duration and revised § 301.6(a). MCAQD removed "requirement" and added "standard" to clarify test run durations outlined in a Federal standard may be acceptable. Rule 270 addresses all types of sources within Maricopa County and MCAQD realizes facility specific concerns may result in deviations from a standard performance test plan. Therefore, the provision in the rule states "or as approved by the Control Officer." § 301.6(a) reads as follows:

301.6 Minimum Testing Requirements:

- a. Each performance test shall consist of three separate test runs, unless otherwise specified in the applicable standard or as approved by the Control Officer, using the applicable EPA method(s). Each test run shall be conducted for at least one hour in duration unless otherwise specified in the applicable standard or as approved by the Control Officer. Adjusting or tuning the process based on real time emissions data not normally available to the equipment operators shall not be cause for testing delays and is prohibited once the test has commenced.

Comment #18: [Our Company] believes the draft rule language change of test report submittals from 30 days to 45 days should apply to both Non-Title V sources and Title V sources. Whether a source is Non-Title V or Title V is not a direct indication of a performance test's complexity or the difficult nature of reviewing and submitting test reports to MCAQD.

[Our Company] conducts performance tests that are similar in nature to Title V facilities. Specifically, [Our Company] conducts RATAs per NSPS Subpart GG and performance tests based on NSPS Subpart KKKK. Though these performance tests are not performed as frequently as Title V sources, [Our Company] does experience the same issues that Title V facilities experience when submitting test report submittals.

Response #18: MCAQD considered your comment on test report submittals and revised § 405 as seen below.

405 TEST REPORT SUBMISSION: The owner or operator shall complete and submit test reports for performance tests as follows, unless otherwise approved by the Control Officer or as specified in the permit.

405.1 Test reports shall be submitted to MCAQD within 45 days after:

- a. The last day of testing of a single piece of equipment; or

- b. The conclusion of testing multiple pieces of equipment with no more than 14 calendar days between tests.

Comment #19: Under the revised Rule 270, under subsection 301.6(d), the phrase "good cause" was previously mentioned twice. The first mention was replaced by "force majeure" but the second later in the subsection is still "good cause." If we are changing the ambiguous phrase "good cause" with "force majeure," should we not replace it in both instances? Defining "force majeure" and not "good cause" while still using the latter language seems to be an oversight. I would recommend changing both instances to "force majeure" to avoid ambiguity.

Response #19: MCAQD considered your comment concerning the ambiguous phrase "good cause" and revised § 301.6(d). MCAQD removed "without good cause" and replaced it with "for reasons other than force majeure" to remove ambiguity. In addition, based on internal review and discussion, MCAQD made two further revisions.

First, to clarify the meaning of Force Majeure in § 301.6(d), MCAQD removed "forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the operator's control" and replaced it with "acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the permitted source" to be consistent with the definition of Force Majeure in this rule.

Second, MCAQD removed "shall" and replaced it with "may" to clarify termination of testing for reasons other than force majeure after the first test run has commenced "may" constitute a failure of the test. This may include something such as failure of an irreplaceable portion of the sample train.

§ 301.6(d) reads as follows:

d. If the Control Officer is present, tests may only be stopped with the Control Officer's approval. If the Control Officer is not present, tests may only be stopped for force majeure, which includes acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the permitted source. Termination of testing for reasons other than force majeure after the first test run has commenced may constitute a failure of the test.

EXACT WORDING OF THE RULE

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

RULE 270: PERFORMANCE TESTS

INDEX

SECTION 100 – GENERAL

101 PURPOSE

102 APPLICABILITY

- 402 103 AUTHORITY TO REQUIRE TESTING
403 104 SUPPORTIVE DATA FOR GOOD MAINTENANCE AND OPERATING PRACTICES

SECTION 200 – DEFINITIONS (~~NOT INCLUDED~~)

- 201 FORCE MAJEURE
202 PERFORMANCE TEST
203 START-UP (WITH HYPHEN)
204 STARTUP (NO HYPHEN)
205 TEST PROTOCOL

SECTION 300 – STANDARDS

- 301 PERFORMANCE ~~TEST TESTS~~ REQUIREMENTS REQUIRED

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

- 401 PERFORMANCE ~~TEST TESTS~~ TIME FRAMES REQUIRED
402 TESTING CRITERIA
403 TESTING CONDITIONS
404 403 ~~NOTICE OF TESTING~~ PROTOCOL
404 NOTIFICATION
405 ~~TESTING FACILITIES REQUIRED~~
406 ~~MINIMUM TESTING REQUIRED~~
407 ~~COMPLIANCE WITH THE EMISSION LIMITS~~
405 TEST REPORT SUBMISSION
408 ~~ADDITIONAL TESTING~~

SECTION 500 – MONITORING AND RECORDS (~~NOT INCLUDED~~)

- 501 RECORDKEEPING AND REPORTING
502 RECORDS RETENTION

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

RULE 270: PERFORMANCE TESTS

SECTION 100 – GENERAL

101 PURPOSE: To establish performance testing requirements for an owner owners and or operator operators of stationary a permitted source sources.

102 APPLICABILITY: This rule applies to permitted sources required to conduct a performance test.

402 **103 AUTHORITY TO REQUIRE TESTING:** Nothing in this rule shall be interpreted construed to limit abrogate the Control Officer's authority to require testing.

403 **104 SUPPORTIVE DATA FOR GOOD MAINTENANCE AND OPERATING PRACTICES:** Nothing in this rule shall be interpreted so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.

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 rules, the definitions in this rule take precedence.

201 FORCE MAJEURE: An event that will be or has been caused by circumstances beyond the control of the permitted source, its contractors, or any entity controlled by the permitted source that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified time frame despite the permitted source's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the permitted source.

202 PERFORMANCE TEST: A stack test, also referred to in EPA regulations as a performance or source test, or relative accuracy test audit (RATA), that measures the amount of a specific regulated pollutant, pollutants, or surrogates being emitted; demonstrates the capture efficiency of a capture system; or determines the destruction or removal efficiency of a control device used to reduce emissions at facilities subject to the requirements of the Clean Air Act.

203 START-UP (WITH HYPHEN): The moment a new piece of equipment has reached its capability to operate at its maximum production rate; or the moment an existing piece of equipment is placed back into operation after missing its last scheduled performance test and has reached its capability to operate at its maximum production rate.

204 **STARTUP (NO HYPHEN):** Relates to normal operation of equipment.

205 **TEST PROTOCOL:** A site-specific test plan that includes information about the facility and process(es), a test program summary, the test schedule if available, data quality objectives, and both an internal and external quality assurance (QA) program.

SECTION 300 – STANDARDS

301 **PERFORMANCE TEST TESTS REQUIREMENTS REQUIRED:** Except as provided in Section 407 of this rule:

- 301.1** ~~The applicable procedures and testing EPA methods contained in the Arizona Testing Manual; 40 CFR 51, Appendix M, 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A, B, through and F, 40 CFR 61, Appendices Appendix B and C, and 40 CFR 63, Appendix A, and 40 CFR 75, Appendices A and B shall be used to determine compliance with the requirements established in this rule or contained in permits issued pursuant to this rule. For a list of Promulgated EPA methods, Proposed EPA methods, Approved Alternative methods, Conditional EPA methods, and Other EPA methods, see the EPA’s Air Emission Measurement Center website.~~
- 301.2** ~~The opacity of visible emissions shall be determined by Reference Method 9 of the Arizona Testing Manual. A permit may specify a method other than Method 9 for determining the opacity of emissions from a particular emissions unit, if the method has been promulgated by the Administrator in 40 CFR 60, Appendix A.~~
- 301.3** ~~The heat content of solid fuel shall be determined according to ASTM Method D-3176-89 (Practice for Ultimate Analysis of Coal and Coke) and ASTM Method D-2015-91 (Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter).~~
- 301.2** The chain of custody procedures in ASTM D4840-99 “Standard Guide for Sample Chain-of-Custody Procedures” shall be followed for all performance testing unless alternative chain of custody procedures are approved by the Control Officer.
- 301.4** **301.3** All ~~except~~ Except for ambient air monitoring and emissions performance testing required under Rule 360 (New Source Performance Standards) and Rule 370 (Federal Hazardous Air Pollutant Program) of these rules, alternative and equivalent test methods in any test protocol plan submitted to the Control Officer may be approved by the Control Officer for the duration of that plan protocol provided that the following three criteria are met:
- a. The alternative or equivalent test method measures the same chemical and physical characteristics as the ~~test~~ EPA method it is intended to replace, and
 - b. The alternative or equivalent test method has substantially the same or better reliability, accuracy, and precision as the ~~test~~ EPA method it is intended to replace, and
 - c. Applicable quality assurance procedures are followed in accordance with ~~the this rule, Arizona Testing Manual, 40 CFR 60~~ the Code of Federal Regulations, or other methods approved by the Control Officer.

403 **301.4 Testing Conditions:** Performance tests shall be conducted under such conditions as the Control Officer ~~shall specify~~ specifies to the owner or operator ~~plant operator~~ based on representative performance (i.e., performance based on normal operating conditions) of the equipment source, or facility. ~~The owner or operator shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests.~~ Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, tests unless otherwise specified in the applicable standard, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made. Upon request, the owner or operator shall make available to the Control Officer such records as may be necessary to demonstrate the performance tests were conducted under representative operating conditions.

405 **301.5 Testing Facilities Required:** The owner or operator of a permitted source shall provide, or cause to be provided, performance testing ~~facilities~~ locations as follows:

- 405.1 **a.** Sampling ports ~~adequate for test methods per the applicable EPA methods to such source~~ which shall include:
- (1) An air pollution control system constructed such that volumetric flows and pollutant emission rates can be accurately determined by applicable EPA methods and procedures; and
 - (2) A stack or duct that is free of cyclonic flow as demonstrated by applicable EPA methods and procedures.
- 405.2 **b.** Safe sampling platform(s).
- 405.3 **c.** Safe access to sampling platforms(s).
- 405.4 **d.** Utilities for sampling and testing equipment.

406 **301.6 Minimum Testing Required Requirements:**

- a.** Each performance test shall consist of three separate test runs, unless otherwise specified in the applicable standard or as approved by the Control Officer, using the applicable ~~test~~ EPA method(s). Each test run shall be conducted for the time and under the conditions specified in the applicable standard at least one hour in duration unless otherwise specified in the applicable standard or as approved by the Control Officer. Adjusting or tuning the process based on real time emissions data not normally available to the equipment operators shall not be cause for testing delays and is prohibited once the test has commenced.
- b.** For the purpose of determining compliance with an applicable requirement standard, the arithmetic mean of results of the three test runs shall apply. The same EPA method(s) shall be used simultaneously for both the inlet and outlet measurements, if applicable; justification for any necessary exceptions shall be provided in the test protocol. Emission rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic mean of the values determined for each individual test run. In the event that a sample is accidentally lost, or conditions occur in which one of the three test runs must be

discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Control Officer's approval, be determined using the arithmetic mean of the results of the two other test runs.

- c. The owner or operator shall record all process and control equipment information that are necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.
- d. If the Control Officer is present, tests may only be stopped with the Control Officer's approval. If the Control Officer is not present, tests may only be stopped for ~~force majeure~~ good cause, which includes acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the permitted source ~~forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the operator's control.~~ Termination of testing for reasons other than force majeure ~~without good cause~~ after the first test run ~~has~~ is commenced ~~may~~ shall constitute a failure of the test.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 **PERFORMANCE TEST TESTS TIME FRAMES REQUIRED:** ~~Within 60 days after a source subject to the permit requirements of this rule has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source and at such other times as may be required by the Control Officer, the owner or operator of such source shall conduct performance tests and shall furnish the Control Officer with a written report of the results of the tests. A performance test shall be conducted per the requirements of this rule as required below. However, RATAs shall be conducted in accordance with the quality assurance procedures in the applicable federal regulations. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including report submittal, extend beyond 180 days.~~

401.1 Shall test equipment within 60 days of start-up; and

401.2 Shall test equipment as specified in the permit.

402 **TESTING CRITERIA:** Performance tests shall be conducted, and data reduced in accordance with the ~~test~~ EPA methods ~~method~~ and procedures contained in this rule ~~the Arizona Testing Manual~~ unless the Control Officer:

402.1 Specifies or approves, in specific cases, the use of a reference EPA method(s) with minor changes in methodology, such changes may be approved in conjunction with approval of the test protocol; or

402.2 Approves the use of an equivalent method; Approves alternative sampling times or sample volumes when necessitated by process variables or other factors; or

- 402.3 Approves the use of an intermediate or major change to an EPA method or the use of an alternative to an EPA method the results of which the Control Officer has determined to be adequate for indicating whether ~~a specific source~~ the equipment is in compliance; or
- 402.4 Waives the requirement for performance tests because the owner or operator ~~of a source~~ has demonstrated by other means to the Control Officer's satisfaction that the equipment source is in compliance with the relevant standard.
- 402.5 ~~Nothing in this rule shall be interpreted to abrogate the Control Officer's authority to require testing.~~

- 404 **403** **NOTICE OF TESTING PROTOCOL:** ~~The owner or operator of a permitted source shall provide the Control Officer two weeks prior notice of the performance test to afford the Control Officer the opportunity to have an observer present. a permitted source must submit a test protocol for each piece of equipment to be tested, unless otherwise approved by the Control Officer, at least 30 calendar days prior to the desired test date to allow the Control Officer to review and approve the site-specific test plan (in accordance with the quality assurance program) and to have an observer present during the test. The results of the quality assurance program will be considered by the Control Officer when determining the validity of the performance test.~~
- 403.1** All proposed changes and/or alternatives to any EPA Method must be included in the test protocol in order to be considered for approval by the Control Officer.
- 403.2** If the owner or operator intends to demonstrate compliance by using an alternative to any EPA method specified in this rule, the owner or operator is authorized to conduct the performance test using an alternative test method only after the Control Officer approves the use of the alternative method when the Control Officer approves the test protocol.
- 403.3** Until authorized to use a change or alternative to an EPA method, the owner or operator of a permitted source remains subject to the requirements of this rule.
- 404 **NOTIFICATION:** The owner or operator of a permitted source required to conduct a performance test shall provide notification (as required) for the following:
- 404.1** Notice of Start-up: The owner or operator shall notify the Maricopa County Air Quality Department (MCAQD) in writing within 14 calendar days after the applicable equipment has achieved the capability to operate at its maximum capacity.
- 404.2** Notice of Testing: The owner or operator shall notify MCAQD in writing at least two weeks prior to the actual date and time of each performance test unless otherwise specified in the applicable standard or permit so MCAQD may have an observer attend. A separate notice of testing is not required if the actual date and time is submitted with the test protocol.
- a.** In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in this rule due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Control Officer as soon as practicable and without delay prior to

the scheduled performance test date and specify the date when the performance test is rescheduled.

- b. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this rule or with any other applicable Federal, State, or local requirement, nor will it prevent the Control Officer from implementing or enforcing this part or taking any other action.

407 ~~COMPLIANCE WITH THE EMISSION LIMITS: Except as provided in Section 408 of this rule, compliance with the emission limits established in this rule or as prescribed in permits issued pursuant to this rule shall be determined by the performance tests specified in this rule or in the permit.~~

405 **TEST REPORT SUBMISSION:** The owner or operator shall complete and submit test reports for performance tests as follows, unless otherwise approved by the Control Officer or as specified in the permit.

405.1 Test reports shall be submitted to MCAQD within 45 days after:

- a. The last day of testing of a single piece of equipment; or
- b. The conclusion of testing multiple pieces of equipment with no more than 14 calendar days between tests.

405.2 Submit a separate test report for each piece of equipment tested.

405.3 All test reports shall be submitted in electronic format and shall provide all required information (in accordance with the test protocol review) to determine whether or not the equipment has successfully demonstrated compliance.

408 ~~ADDITIONAL TESTING: In addition to performance tests specified in this rule, compliance with specific emission limits may be determined by:~~

~~408.1 Opacity tests.~~

~~408.2 Emission limit compliance tests specifically designated as such in the rule establishing the emission limit to be complied with.~~

~~408.3 Continuous emission monitoring, where applicable quality assurance procedures are followed and where it is designated in the permit or in an applicable requirement to show compliance.~~

~~408.4 Nothing in this rule shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.~~

SECTION 500 – MONITORING AND RECORDS:

501 RECORDKEEPING AND REPORTING: Any owner or operator subject to this rule shall comply with the requirements set forth in this section. Any records and data required by this section shall be kept on site at all times in a consistent and complete manner and be made available without delay to the Control Officer or his designee upon request.

502 **RECORDS RETENTION:** Copies of reports, logs, and supporting documentation required by the Control Officer shall be retained for at least five years. Records and information required by this rule shall also be retained for at least five years.