

**NOTICE OF FINAL RULEMAKING
MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS
REGULATION VI – EMERGENCY EPISODES**

RULE 600: EMERGENCY EPISODES

The Maricopa County Air Quality Department (MCAQD) revised Rule 600 (Emergency Episodes). The Control Officer is posting this Notice of Final Rulemaking on the MCAQD website as required by 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: Scott Kahldon or Kimberly Butler
Maricopa County Air Quality Department
Planning and Analysis Division

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

Telephone: (602) 506-6010

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Email: AQPlanning@maricopa.gov

Online: [Submit a Comment](#)

3. Rulemaking process:

This rulemaking (AQ-2017-010-Rule 600) followed procedures identified in state statutes and the Maricopa County EROP Policy. The following rulemaking steps were completed:

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|---|------------------------------------|
| County Manager Briefing: | December 2017 |
| Stakeholder Workshops: | June 11, 2018 December 12, 2018 |
| Board of Health Meeting to Initiate Regulatory Change: | July 23, 2018 |
| Notice of Proposed Rulemaking: | June 03, 2019 |
| Notice of Supplemental Proposed Rulemaking: | September 03, 2021 |

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| Board of Health Meeting to Recommend Approval to the Board of Supervisors: | October 25, 2021 |
| Board of Supervisors Formal Meeting to set the Public Hearing: | November 03, 2021 |
| Board of Supervisors Public Hearing: | December 08, 2021 |

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

Rule 600 establishes criteria to determine when air pollutant concentrations are significantly elevated and establishes appropriate control actions to prevent the occurrence of ambient air pollutant concentrations which would cause significant harm to the health of persons. The advisories described in Rule 600 are not the same as a Health Watch or High Pollution Advisory. A Health Watch or High Pollution Advisory is issued when air pollution levels are expected to approach or exceed the federal health-based air quality standards. The federal health-based air quality standards are lower than the thresholds for air pollution alerts, warnings, and emergencies described in Rule 600. The MCAQD revised Rule 600 and aligned the rule with the episode level criteria and significant harm levels with the criteria listed in Arizona Administrative Code (A.A.C.) R18-2-220 (Air Pollution Emergency Episodes) which was amended by the Arizona Department of Environmental Quality (ADEQ) in March of 2019. In addition, the MCAQD revised Rule 600 to address stakeholder comments received after the original Notice of Proposed Rulemaking was posted to the EROP website in June 2019.

Rule 600 is needed to support the Maricopa County portion of Arizona’s infrastructure State Implementation Plan (SIP). Each time a new National Ambient Air Quality Standard (NAAQS) is promulgated, each state is required to submit an infrastructure SIP revision demonstrating that the state has the legal authority and resources to implement the NAAQS. Among other things, the infrastructure SIP must demonstrate that state and local agencies have adequate permitting, compliance, and enforcement programs and authority to implement contingency plans during an air quality emergency.

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, subsections A, B and C, and 41-1035:

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

This rulemaking revised Rule 600.

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

Not Applicable. This rule was revised to align the rule with A.A.C. R18-2-220. Also, Rule 600 was revised to more closely align with ADEQ's Procedures for the Prevention of Emergency Episodes and to address stakeholder comments.

(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.

Not Applicable. This rule was revised to align the rule with A.A.C. R18-2-220. Also, Rule 600 was revised to more closely align with ADEQ's Procedures for the Prevention of Emergency Episodes and to address stakeholder comments.

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

Not Applicable. This rule was revised to align the rule with A.A.C. R18-2-220. Also, Rule 600 was revised to more closely align with ADEQ's Procedures for the Prevention of Emergency Episodes and to address stakeholder comments.

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, subsections A, B, and 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: Scott Kahldon or Kimberly Butler
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Address: 301 W. Jefferson Street, Suite 410
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An identification of the persons who will be directly affected by, bear the costs of or directly benefit from the rulemaking.

This rulemaking should not impose any significant costs on Maricopa County residents or businesses unless an emergency episode occurs. Maricopa County residents and businesses will benefit from this rulemaking because Rule 600 is part of the required elements of an infrastructure SIP.

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 the MCAQD or on any other agencies affected by the rulemaking unless an emergency episode occurs.

(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 significant new costs on political subdivisions of this state affected by the rulemaking unless an emergency episode occurs. If an emergency episode does occur, the costs will vary depending on the pollutant and the length and severity of the emergency.

(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.

This rulemaking will not directly affect any businesses unless an emergency episode occurs. If an emergency episode does occur, the costs will vary depending on the pollutant and the length and severity of the emergency.

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. This rulemaking will not directly affect any businesses, agencies, or political subdivisions of this state unless an emergency episode occurs. If an emergency episode does occur, the costs and the subsequent impact to private and public employment will vary depending on the pollutant and the length and severity of the emergency.

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 should not affect any small businesses unless an emergency episode occurs. If an emergency episode does occur, small businesses may be asked to reduce or curtail vehicle use and small businesses operating under an air pollution control permit may be asked to curtail operations that generate emissions and maximize the efficiency of control equipment.

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

There are no administrative costs required for compliance with the rulemaking. If an emergency episode does occur, small businesses may be asked to reduce or curtail vehicle use and small businesses operating under an air pollution control permit may be asked to curtail operations that generate emissions and maximize the efficiency of control equipment. If an emergency episode does occur, the costs will vary depending on the pollutant and the length and severity of the emergency episode.

(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.

There are no reporting requirements in Rule 600 unless an emergency episode occurs. There are no compliance requirements in Rule 600 unless an emergency episode occurs. If an emergency episode occurs, the Control Officer will cooperate with the Director of the ADEQ to determine which control actions are necessary to reduce elevated concentrations of air pollutants. In addition, the Control Officer will communicate the necessary control actions to permit holders, businesses, and the public.

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

There are no schedules or deadlines for compliance or reporting in Rule 600.

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

There are no reporting requirements in Rule 600 unless an emergency episode occurs. There are no compliance requirements in Rule 600 unless an emergency episode occurs. If an emergency episode occurs, the Control Officer will cooperate with the Director of the ADEQ to determine which control actions are necessary to reduce elevated concentrations of air pollutants. In addition, the Control Officer will communicate the necessary control actions to permit holders, businesses, and the public.

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

There are no design standards or operational standards in Rule 600.

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

There are no reporting requirements in Rule 600 unless an emergency episode occurs. There are no compliance requirements in Rule 600 unless an emergency episode occurs. If an emergency episode occurs, the Control Officer will cooperate with the Director of the ADEQ to determine which control actions are necessary to reduce elevated concentrations of air pollutants. The extent to which small businesses are required to comply with control actions would depend on the pollutant and the length and severity of the emergency episode.

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

Private persons and consumers would only be affected by Rule 600 if an emergency episode occurred, and the pollutant level was high enough to constitute an air pollution emergency. If an air pollution emergency were to occur, the costs would vary depending on the pollutant and the length of the emergency. However, because an air pollution emergency can only be declared when a pollutant concentration is approaching the significant harm level, the health benefits associated with resolving the emergency episode will far outweigh the costs associated with temporary restrictions on public vehicle use.

A statement of the probable effect on state revenues.

It is unlikely that this rulemaking will 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. If an emergency episode does occur, the costs will vary depending on the pollutant and the length and severity of the emergency episode.

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 nonelected alternatives.

The MCAQD was not able to identify less intrusive or costly methods for rapidly reducing the concentration of air pollutants during an emergency episode.

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.

This rule is not directly based on any data. The pollutant concentrations that would trigger an air quality alert, warning, or emergency are identified by the United States Environmental Protection Agency (EPA) when a new NAAQS is promulgated, or an existing NAAQS is revised.

7. The effective date of the rule:

The effective date of this rulemaking was December 08, 2021.

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.

§ 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.

The MCAQD is in compliance with A.R.S. §§ 49-112 (A) and (B). Rule 600 is required under § 110(a)(2) of the Clean Air Act, which requires States to submit an infrastructure SIP within three years after the promulgation or revision of any NAAQS. Each infrastructure SIP must contain adequate provisions prohibiting emissions of any air pollutants in amounts which will interfere with measures for the prevention of significant deterioration of air quality. In addition, each infrastructure SIP must provide authority and adequate contingency plans to prevent pollution from any source or combination of sources from causing imminent and substantial endangerment to public health or welfare. The infrastructure SIP must also provide necessary assurances that the State and any local government agencies designated by the State, will have adequate authority to carry out such implementation plans.

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:

| <u>Notice</u> | <u>Date of Posting</u> |
|--|-----------------------------------|
| Briefing Notification to County Manager: | December 2017 |
| Notice of Stakeholder Workshop: | May 23, 2018 November 21, 2018 |
| Notice of Board of Health Meeting: | July 06, 2018 |
| Notice of Proposed Rulemaking: | June 03, 2019 |
| Notice of Supplemental Proposed Rulemaking: | September 03, 2021 |
| Notice of Board of Health Meeting to Make Recommendations to the Board of Supervisors: | October 08, 2021 |
| Notice of Public Hearing: | November 03, 2021 |

(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.

No changes were made after the Notice of Supplemental Proposed Rulemaking was published on September 03, 2021.

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 three (3) stakeholders. All of the comments were reviewed and evaluated by the MCAQD.

Comment #1: The Notice of Proposed Rulemaking does not provide the reader with a clear date for the close of public comment. Usually in the preamble to the proposed rule, the County will provide a date for the close of comment period. Although the preamble in Section 3 sets a date for receipt of request for an oral proceeding, we were unable to find a date for the close of comments. Accordingly, we are submitting prior to July 5 just to make certain our comments are timely.

Response #1: We appreciate your efforts to provide timely comments. Statue does not provide any requirements for the close of comments, other than that the comment period must be closed before the Board of Supervisors can act on the proposed rule. We encourage all interested parties to attend stakeholder workshops and to provide comments as early as possible during the rulemaking process.

Comment #2: Section 301.1 of the proposed rule reads as follows:

Section 301.1 “continuance or recurrence of alert level concentrations for the same pollutant during the subsequent 24-hour period.”

Section 301.2 “continuance or recurrence of concentrations of the same pollutant exceeding the warning level during the subsequent 24-hour period.”

Section 301.3 “continuance or recurrence of concentrations of the same pollutant exceeding the emergency level during the subsequent 24-hour period.”

For consistency, it would be helpful if all three sections used similar language. Accordingly, we would suggest that Section 301.1 be rewritten to mirror the language in 301.2 and 301.3.

Response #2: Thank you for your comment. The MCAQD revised Section 301.1 to mirror the language in Sections 301.2 and 301.3. Section 301.1 now reads as follows:

Section 301.1 – An air pollution alert shall be declared when any of the alert level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the alert level during the subsequent 24-hour period.

Comment #3: Pursuant to Section 301, the triggers for an Episode Level (i.e. Alert, Warning or Emergency) include an exceedance of the associated level coupled with “meteorological conditions” indicating a continuance or recurrence during the

subsequent 24 hour period. (See, Section 301). We were unable to find in the rule any indication about what factors are used to determine the meteorological conditions requirement and also what agency or group is responsible for this task. Accordingly, since this is such an important part of the rule, it would be helpful for the reader, and the regulated community, if the County included the factors that go into making the meteorological conditions determination and also the agency or group that is responsible for making this determination.

Response #3: Thank you for your comment. The MCAQD revised Section 301 and added Section 403 (Acquisition of Forecasts) to identify the types of information the Control Officer will use to determine if an emergency episode is occurring. It is not possible to enumerate every combination of meteorological factors that may result in the declaration of an air quality alert, warning, or emergency.

Section 301 – The Control Officer’s designated representative shall acquire air quality forecasts and meteorological data in accordance with Section 403 of this rule. The Control Officer shall declare air pollution alerts, warnings, and emergencies in accordance with the following criteria:

Section 403 – The Control Officer’s designated representative shall review air quality forecasts from ADEQ, weather forecasts and alerts from the National Weather Service (including atmospheric stagnation advisories, heat advisories, wind advisories, and high wind watches and warnings), and other reliable sources of meteorological data to determine if it is likely that the episode level criteria in Table 600-1 will be exceeded. The Control Officer will also use air quality forecasts, weather alerts, other reliable sources of meteorological data, and monitoring data to determine if a continuance or recurrence of alert level, warning level, or emergency level pollutant concentrations is likely.

Comment #4: It appears that Section 301.3 creates two separate triggers for an Air Pollution Emergency. First is the emergency based upon exceedance of the Emergency threshold. Second, is if the air quality associated with a Warning Level exceedance does not improve within 48 hours. If this is the case, it would be helpful if the County added an “or” to the end of subsection (a) so that the reader understands that those are two separate authorities and that they are not otherwise conflicting.

Additionally, in Section 301.3(b) what does the County mean by “not improved?” Is it possible to have a monitor show signs of “improvement,” yet still be above the “Warning Level?” Can a monitor show signs of improvements below the warning level, but still be close enough to the Warning Level to justify declaring the emergency? Also, if meteorological conditions improve, but the concentrations at the affected monitors do not, or visa-versa, shall an emergency be declared? In other words, must there be both an improvement in concentrations and meteorological conditions to avoid an emergency under Section 301.3(b)? We would like to see the County clarify these issues so that the reader, and regulated community, has greater understanding and certainty about when an event may be triggered.

Response #4: Thank you for your comment. The MCAQD added “or” to the end of Section 301.3(a) and revised 301.3(b) to clarify when an air pollution emergency shall be declared.

Section 301.3 Air Pollution Emergency: An air pollution emergency shall be declared:

Section 301.3(a) When any of the emergency level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the emergency level during the subsequent 24-hour period; or

Section 301.3(b) If air pollution concentrations have not decreased below the warning level concentrations listed in Table 600-1 within 48-hours after the declaration of an air pollution warning.

Comment #5: Section 301 sets the standards under which an Alert, Warning, or Emergency “shall be declared.” However, the rule appears silent on who actually declares the Alert, Warning or Emergency. It would appear that the Control Officer, under Section 302, directs the implementation of Control Actions. However, the rule is silent on who actually declares the event or, for that matter, who directs its termination. Accordingly, [Our Company] would like the County to provide language that helps to answer these questions, so that should we encounter an Episode Level event, all parties are aware of the authorities and responsibilities.

Response #5: Thank you for your comment. The MCAQD revised Section 301 to clarify that the Control Officer shall declare air pollution alerts, warnings, and emergencies.

Comment #6: The County asserts that “The MCAQD is proposing to amend Rule 600 (Emergency Episodes) to align the rule with A.A.C. R18-2- 220 (Air Pollution Emergency Episodes) which was amended by the Arizona Department of Environmental Quality (ADEQ) in March of 2019.” However, the ADEQ rules do not set the emergency procedures in rule. Therefore, it is unclear how the County is “aligning the rule” with ADEQ, only to have a clear difference in approach. For example, the ADEQ rules do not provide any requirements for source abatement or permit restrictions during an emergency episode. The only reference to agency action is set forth in the attached document entitled “Procedures for the Prevention of Emergency Episodes.” Even this document provides only limited authority stating, “the Director will request emission reduction by applicable sources under State jurisdiction.” The document goes on to provide that “[t]he Director will contact local control agencies and health departments in the affected area(s) to inform them of the situation and request emission reduction by applicable sources under their jurisdiction.” The County approach does not include “request emission reduction,” but rather is more rigid and sets forth as series of command-and-control requirements. It is unclear how the County goes from ADEQ’s general language to the specific requirements set forth in Section 302.

Response #6: Thank you for your comment. The changes align the episode level criteria and significant harm levels with the criteria listed in A.A.C. R18-2- 220 (Air Pollution Emergency Episodes).

For sources under MCAQD control, Rule 600 includes specific control actions to ensure that MCAQD can successfully curtail emissions during an emergency episode. In “Procedures for the Prevention of Emergency Episodes,” ADEQ divides

responsibility for the preparation and issuance of Air Quality Advisories into two categories. Section 2.1 specifies that urban advisories “will be prepared by the local pollution control agencies in consultation with ADEQ.” Section 2.2 specifies that ADEQ will prepare advisories for emergency episodes that are the result of industrial emissions in rural areas.

The “Procedures for the Prevention of Emergency Episodes,” also states that during an alert, warning, or an emergency, “the Director will contact local control agencies and health departments in the affected area(s) to inform them of the situation and request emission reduction by applicable sources under their jurisdiction.”

To ensure the MCAQD can successfully curtail emissions during an air pollution alert, warning, or emergency, the Control Actions in Rule 600 need to be more specific to the sources that exist within Maricopa County. The specific requirements set forth in Section 302 are similar to the Example Regulations for Prevention of Air Pollution Emergency Episodes in Appendix L to 40 CFR 51.

In addition, new language in Section 302.2(f) was added to “request emission reductions to minimize air pollution” from sources subject to Rule 322. The Section now reads as follows:

Section 302.2(f): As demand for electricity decreases, as a result of the cutbacks implemented in accordance with subsections 302.2(a) through (e) of this rule, the MCAQD shall contact the operators of power plants subject to Rule 322 to request emission reductions to minimize air pollution.

Comment #7: Section 302.1 asserts that the rule is to protect “that portion of the population at risk.” To this end the Alert, Warning and Emergency levels anticipate that any exceedance at any monitoring site can trigger “control actions.” Yet the Control Actions set forth in Section 302 are not localized to a portion of the population at risk or the exceedance of any monitoring site. Instead, the Control Actions seem to be without relation to a specific monitoring site or a portion of the population at risk or even related to the pollutant at issue.

For example, Section 302.1(a) reads as follows: “All permits to burn shall be suspended until further notice. The forest service shall be notified to postpone slash burning in affected areas.” This section seems a rather blunt response to the specific nature of the exceedance. A burn permit could be issued for land far away from the affected monitor, yet be directly impacting that affect monitor. In this case, would it be possible to still allow the burning since it was not “in the affected areas?”

Response #7: Thank you for your comment. You are correct that the control actions are not localized to the specific geographic area where the episode criteria have been exceeded.

Although there are situations where a single source of air pollution could result in an exceedance of the episode level criteria, such as a leaf blower operating near an air quality monitor, these are not the types of situations that would result in the declaration of an alert, warning, or an emergency. When significantly elevated concentrations of air pollutants are detected at a monitor, the MCAQD typically dispatches staff to determine what is causing the pollution. If the source of the

pollution is identified, the MCAQD will generally conduct an inspection and use the principles of compliance assurance to ensure a reduction in emissions. If the standard compliance and enforcement procedures do not result in emission reductions, and if the actions of a single source or a small group of sources is causing imminent and substantial endangerment to the public health or the environment, the MCAQD can use authority granted under A.R.S. § 49-512 to reduce the emission of air pollutants from the source or sources causing the imminent and substantial endangerment.

In most cases, the concentration of pollutants varies from one monitor to another. While sources near a monitor can have an effect, the actual concentration observed at each monitor is generally the result of aggregate emissions over a large area and atmospheric conditions. For example, the Falcon Field monitor frequently records the highest concentration of ozone. This is not because there are major sources of ozone precursors near the monitor. Rather, this occurs due to atmospheric conditions and because there are many sources of ozone precursors in Maricopa County and the surrounding areas. Due to transport, it is often not possible to reduce the concentration of air pollution in one area without reducing aggregate emissions over a larger area.

Further, the pollution levels that qualify as “episodes” under this rule are considerably higher than exceedances of a NAAQS. The thresholds are very near the upper limit of what EPA has determined to be unhealthy with respect to an “alert,” very unhealthy with respect to a “warning,” and hazardous with respect to an “emergency.” The MCAQD has no record of events that caused a declaration of an air pollution warning in the past 35 years. “Alert” level concentrations have occurred for PM_{2.5} on New Year’s Day, for PM₁₀ during dust storms qualifying as exceptional events, prior to 1987 for CO, and possibly prior to 1980 for ozone. Consequently, these extreme pollutant concentrations are not likely to be limited to the area near a specific monitor.

Finally, from a practical standpoint, if it is necessary to implement control actions to prevent significant harm from air pollution, these actions need to be communicated and implemented as efficiently as possible. Therefore, by using easily understood boundaries (such as the borders of Maricopa County) it is easier for affected sources to know how to respond. This is very similar to the concept of a restricted burn period, which is declared for all of Maricopa County to prevent the exceedance of a NAAQS.

Comment #8: Additionally, Section 302.1(b) reads as follows: “Incineration shall be limited to the hours of 12 noon to 4:00 p.m.” This is similar to our comments on Section 302.1(a) above. There is no requirement that the incinerator be located in the affected areas or impacting the affected areas just that it exists within Maricopa County. Moreover, is there a reason for the limitation of 12 noon to 4:00 pm? It would seem that these limited hours of operation would be based in science, but it would be helpful for the County to explain the reasoning behind the hour restrictions in its response to public comments.

Response #8: The hours of 12 noon to 4:00 pm were included in the Example Regulations for Prevention of Air Pollution Emergency Episodes in Appendix L to 40 CFR 51 because mid-day is generally the period of highest atmospheric turbulence. The increased atmospheric turbulence at mid-day allows for increased vertical and horizontal distribution of air pollutants. These provisions allow sources to operate when air pollution concentrations are elevated during the portion of the day when pollutants are least likely to accumulate. These provisions make sense in Maricopa County where atmospheric inversions are the predominant cause of winter particulate matter exceedances.

Comment #9: In the root of Section 302.1 and 302.2, the County has inserted the clause “as applicable to the source(s) emitting the pollutant(s) of concern” in an apparent attempt to provide some limitation on the County’s use of this section. We appreciate the intent of using this limiting language. Unfortunately, this limiting language is rather broad and undefined. For example, “pollutants of concern” is undefined. How does the County intend to address ozone exceedances when no source actually emits ozone? Additionally, neither NO_x nor VOCs are listed in Table 600-1, yet both are integral to ozone exceedances.

Response #9: Thank you for your comment. The MCAQD added a definition for the term “pollutant of concern” to Section 202.

202 POLLUTANT OF CONCERN: If an air quality alert, warning, emergency is declared for:

202.1 Sulfur dioxide (SO₂), the pollutants of concern shall be sulfur oxides;

202.2 PM₁₀, the pollutants of concern shall be PM₁₀ and PM_{2.5};

202.3 PM_{2.5}, the pollutants of concern shall be PM_{2.5}, ammonia, volatile organic compounds (VOC), nitrogen oxides (NO_x), and SO₂;

202.4 Ozone, the pollutants of concern shall be NO_x, VOC, and carbon monoxide (CO);

202.5 Nitrogen dioxide (NO₂), the pollutants of concern shall be NO_x; and

202.6 CO, the pollutant of concern shall be CO.

Comment #10: Furthermore, Section 302.1(c) states that “Sources operating pursuant to an air pollution control permit shall be notified to minimize emissions.” This section does not require the emissions to be the pollutant identified in Table 600-1 and exceeding the level. Finally, this section leaves open the question of, does the source need to be permitted for the NAAQS in question or just any pollutant? We would like to see the County put in more specific language that clearly spells out when a permitted source will be required to take action. Or, in the alternative, put in language allowing the Control Officer to work with affected source to find reasonable and workable reductions.

Response #10:

The MCAQD clarified Section 302.1(c) specifying that sources shall minimize emissions of the pollutant of concern.

Section 302.1(c) – Sources operating pursuant to an air pollution control permit shall be notified to minimize emissions of the pollutant of concern by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12 noon to 4:00 p.m. This control action shall not be applicable to any operations that are necessary to protect public health, public safety, or public welfare.

Comment #11: Section 302.2(d) sets forth the requirements associated with power plants during an Air Pollution Warning. It states that “[i]f technologically feasible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.”

We have several concerns with this wording. First, utilities do not “generate load.” Utilities generate power which serves a load. Second, it is unclear how a power plant can “transfer loads outside the affected area.” As mentioned above, utilities do not generate load, so utilities are unable to transfer loads outside the affected area. Third, the requirement that “power plant production shall be reduced by purchase of available energy from neighboring utilities” is confusing, counterproductive and likely beyond the County’s authority. Although we understand the general idea that the County is seeking to employ here, there are some technical, financial and legal limitations that must be understood. Our generation mix is varied in source, be it coal, gas, nuclear, solar, biomass or battery. Additionally, our generation is located throughout the state of Arizona, not just within Maricopa County. Accordingly, it may be possible for [Our Company] to utilize its own resources outside of the County to meet the needs of an Episode Level event, yet the rule appears to require us to purchase energy from a neighboring utility. This seems counterproductive. Additionally, electrical transmission is subject to the potential for constraint. In other words, power lines can only carry so much power, which is often why generation is located close to what is called the “load pocket.” Consequently, it may not be possible to reduce generation within a load pocket if the transmission lines are constrained. Moreover, there are legal requirements on utilities that may conflict with the County’s assumed authority (See, comment VIII below).

Finally, the use in Section 302.2(d) of the term “technologically feasible” in place of “possible” creates significant burdens for a regulated utility as transfer of power into and out of a load pocket is technologically feasible, but may not be operationally or legally possible or have other limitations. Accordingly, we request that the County revert to the original language of “possible,” as that will give the utilities the opportunity to work with the County to find a solution, instead of being forced to do something that may have unintended consequences but is technologically feasible. Also, the County’s use of the term “power plant” is inconsistent with the air quality rules. There are, in fact, “power plants” that produce low or zero emissions, such as solar and nuclear power plants. It would be helpful if the County defined power

plant to include fossil fuel fired power generation so that the focus would be on the fossil fleet and not bring into question solar or nuclear operations.

Furthermore, ADEQ's Procedure states that "The general public will be urged to remain indoors whenever possible and avoid prolonged or strenuous exertion." The procedure of requiring that people shelter indoors is generally at odds with reducing power generation since it is likely that Episode Level exceedances would happen during hot, stagnant, summer days, which will be the time that the grid is under the most stress further limiting the ability of the utility to reduce generation or import power into the load pocket, even if technologically feasible.

Response #11: Thank you for your comment. The MCAQD removed the language in section 302.2(d) and revised the language in section 302.2(f) to read as follows:

As demand for electricity decreases, as a result of the cutbacks implemented in accordance with subsections 302.2(a) through (e) of this rule, the MCAQD shall contact the operators of power plants subject to Rule 322 to request emission reductions to minimize air pollution.

Comment #12: Section 302.3(c) states, "As energy demand decreases, as a result of the control actions in Sections 302.3(a) and 302.3(b), power plants shall reduce operations so that generating loads do not exceed energy demand." Again, as mentioned before, power companies generate electricity to serve a load. Power companies do not "generate load." Also, energy demand is a temporal issue. In other words, the load or demand is continuously fluctuating requiring us to use various methods to ensure we have adequate power available as called upon to serve load, protect the integrity of the grid, and maintain reliability. It would appear that the purpose of this section is to prevent a power plant from generating more power in the affected area than needed to serve load in the affected area. The concept makes sense in times of a health emergency, but is not easily defined. In order to comply with service and reliability requirements, utilities have certain limitations on their ability to limit generation. [Our Company] is happy to work with the County to better define the terms and conditions applicable for these Event Level Exceedances, but we are concerned that the current language is not workable.

Response #12: The initially proposed language as drafted in the 2019 Notice of Proposed Rulemaking referred to in this comment, was removed.

Comment #13: It may be prudent for the County to ask the Arizona Corporation Commission ("ACC") for input on these rules. If the Episode Level Criteria are exceeded and the County enacts the Control Actions in 302.2, the County may be interfering with the authorities given to the ACC under Article 15 of the Arizona Constitution. Also, if the Episode Level Criteria are exceeded during peak summer months, curtailing energy production and transfer of the load may impact reliability as well as the health and safety of customers.

Response #13: Many revisions to the rule language were made since this comment was received, including revisions to language in Section 302.2.

Comments 14 through 22 were provided by a commenter on a draft version of Rule 600. The comments are linked to the [draft version of Rule 600](#) to provide context for each of the comments. Each comment is numbered in the right-

hand margin of the draft version of Rule 600 and a response to each numbered comment is listed below.

Comment #14: Perhaps consider moving these to the definitions? It doesn't seem to really fit well in this paragraph.

Response #14: The MCAQD considered your comment but determined it was not necessary to revise the purpose language for rule clarity.

Comment 15: In Section 101 above, the purpose is described as establishing criteria used to determine when air pollutant concentrations are significantly elevated and to establish appropriate control actions to prevent the occurrence of ambient air pollutant concentrations that would cause significant harm to the health of persons and the words "pollution emergency episodes" was struck, yet in this paragraph, the word "episodes" remains. Would it be more appropriate to change episodes to air pollutant concentrations are significantly elevated to align with the purpose of this rule?

Response #15: The MCAQD considered your comment but decided to leave episode in the rule. Episode is used in the ADEQ's "Procedures for Prevention of Emergency Episodes" and air pollutant concentrations is not used. Also, episodes is used throughout this rule and is a common term.

Comment #16: Is CO a pollutant of concern for Ozone?

Response #16: The MCAQD considered your comment but determined that carbon monoxide should remain as a pollutant of concern for ozone as it participates in the creation of ozone.

Comment #17: How do sources measure this? Is a 40% reduction from permitting limits, or from actual emissions?

Response #17: The MCAQD revised the language and added actual emissions to clarify the rule.

Comment #18: Recommend not removing this control measure. If it's a PM10 episode, it would be helpful if this activity would be able to be postponed.

Response #18: MCAQD considered your comment and determined the strikethrough language is appropriate as the MCAQD does not have the authority to regulate agriculture.

Comment #19: This is a bit vague. How does MCAQD define "as demand for electricity decreases"? Who decides what reduced demand means? Is it when customer demand decreases? Also, this is dependent upon the pollutant of concern? Suggest taking this out entirely, or suggest language that says "shall reduce emissions as much as possible"...Or power plants subject to Rule 322 will ensure implementation of best management practices to minimize air pollution...This is a bit vague also, Can MCAQD clarify what a request for emissions reductions look like? See above comment.

Response #19: The MCAQD considered your comment and defines a decrease in demand for electricity as a decrease in activity from cutbacks implemented in accordance with subsections 302.2(a) through (e). The MCAQD also considered

your comment on "request for emissions reductions" and determined to add language "to minimize air pollution" at the end of the sentence for rule clarity.

Comment #20: To me, this means if the Governor directs us, [Our Company] shall stop operating it's generating units.

Response #20: The MCAQD considered your comment and determined that it was not necessary to revise this section. When an air pollution emergency has been declared, sources operating pursuant to an air pollution control permit shall cease operations as directed by the Governor.

Comment #21: Perhaps add the word forecasts from NWS?

Response #21: The MCAQD revised the language and added weather forecasts.

Comment #22: Whose emissions? Do you mean pollutant concentrations in the air?

Response #22: The MCAQD considered your comment and deleted "emissions" and revised "pollutant concentrations" to read "air pollutant concentrations" for further clarity.

Comments 23 through 30 (except for comment 26 which was provided in the associated email received with the attached comments) were provided by a commenter on a draft version of Rule 600. The comments are linked to the draft version of [Rule 600 to provide](#) context for each of the comments. Each comment is numbered in the right-hand margin of the draft version of Rule 600 and a response to each numbered comment is listed below.

Comment #23: Since episode is used throughout the document, it may be helpful to add this term within the section

Response #23: The MCAQD considered your comment and determined that is was not necessary to revise this section.

Comment #24: Why is CO listed here?

Response #24: The MCAQD considered your comment but determined that carbon monoxide should remain as a pollutant of concern for ozone as it participates in the creation of ozone.

Comment #25: Rather than listing 2 specific rules, consider using verbiage related to essential public service (see Southcoast Air Pollution Emergency Contingency Actions). There are other services that may need to operate to ensure public safety – One example are our microgrids – non-emergency engines that operate under Rule 324. As written, operation of these units would be limited even if they are deemed necessary to maintain grid stability. Clearly, the last sentence of this section capture this.

Response #25: The MCAQD considered your comment and deleted language specific to Rule 322 and Rule 324 for rule clarity.

Comment #26: Palo Verde is a power plant that does not operate under Rule 322! So, it strengthens our comment that the language related to Rule 322 and 324 should be removed and only keep "control action shall not be applicable to any operation that are necessary to protect public health, public safety, or public welfare."

Response #26: The MCAQD considered your comment and deleted language specific to Rule 322 and Rule 324 for rule clarity.

Comment #27: Same comment as above – If language related to Rule 322 is kept in Rule 600, it needs to be made clear units complying with Rule 322 by taking operational limits (<10% capacity factor). Again, I would say that the last sentence would suffice since electricity would be considered operation necessary to protect public safety

Response #27: The MCAQD considered your comment and deleted language specific to Rule 322 and Rule 324 for rule clarity.

Comment #28: This rule has not monitoring or recordkeeping requirements noted. Am I correct to interpret that facilities would not be required to maintain records related to their emission reductions?

Response #28: The MCAQD considered your comment and added a section for Monitoring and Records. The Section reads as follows:

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 designee upon request.

502 RECORDS RETENTION: Copies of reports, logs, and supporting documentation required by the Control Officer shall be retained for at least 5 years. Records and information required by this rule shall also be retained for at least 5 years.

503 RECORDS OF CONTROL ACTION: An owner or facility shall maintain a log of the control actions taken during an Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency.

In addition, each owner and operator is responsible to follow the recordkeeping within their permit and other applicable rules.

Comment #29: I think it is important to note that generation of electricity always follows demand – this occurs within minutes. It is also important to note, that decreased demands within Maricopa County, does not always equal decreased demand on the system. The grid is maintained at a much larger level than county based geography, so units within Maricopa County may be need to help support the western loop. I am not opposed to the language since it states the agency will request the emission reductions, but it is unnecessary.

Response #29: The MCAQD considered your comment on requesting emission reductions and added language "to minimize air pollution" at the end of the sentence for rule clarity.

Comment #30: Include language related excluding operations necessary to maintain public safety.

Response #30: The MCAQD considered your comment and added "except those vital for public safety and welfare and enforcement of the emergency episode control actions." at the end of the sentence in section 302.3(a).

Comment #31: Strategic Goals and Objectives

Promoting Educational Quality

- Goal 1.1: Maintain focus on Student Learning and Achievement
 - Continue developing and fine-tuning expectations regarding completion and other measures of student success
 - Provide data reports and relevant professional development opportunities to stimulate the sharing of best practices for enhancing student learning and achievement
- Goal 1.2: Support innovation and responsiveness for our member institutions within the changing landscape of higher education
 - Continue to revise policy and process in order to provide timely and thoughtful substantive change review
 - Provide frameworks and approaches for non-traditional higher education experiences, including dual enrollment, prior learning, competency-based pathways to completion, etc.

Capitalizing on New Technology

- Goal 2.1: Use the tools of technology to enhance the effectiveness, efficiency, and quality of unit operations and internal collaboration.
 - Implement all phases of the Salesforce integrated database, including all requisite training and communication to ease transition.
 - Evaluate and re-design business processes based on the effective use of technology.
- Goal 2.2: Better serve the needs of our constituents—SACSCOC member institutions, students and their families, the public, the Department of Education, congress— through technology.
 - Optimize Salesforce features to allow for more direct institutional engagement and use (e.g. updating information, uploading reports, reviewing information)
 - Create brief “hot topics” videos to address different constituent needs
 - Revamp FAQs for specific process areas (e.g., annual reporting, reaffirmation process, fifth year process, substantive change process, etc.)

Enhancing Training

- Goal 3.1: Reimagine how to best deliver training and professional development to institutional representatives, peer evaluators, SACSCOC board members, and SACSCOC staff and revise training experiences for those.
 - Conduct a gap analysis to identify areas not addressed in current training
 - Establish complementary expected learning outcomes for staff presentations
 - Develop a CEU-type documentation process for training sessions to recognize participant effort and to verify participant learning/competence via an assessment process using case examples.
 - Create a more robust training program for accreditation liaisons
 - Continue to redesign/flip training to reduce/eliminate lecturing and increase participant interaction and active learning, offering professional development for staff who have not worked with this format

Proactively Communicating the Commission’s Message

- Goal 4.1: Clearly articulate and communicate the purpose and value proposition of SACSCOC.
 - Develop a comprehensive, integrated, strategic communication plan centered on the Commission’s value proposition
 - Create widely-distributed external communications through multiple media highlighting “What we do,” focusing on student success and educational quality tied to accreditation efforts/activities of the institution
 - Enhance the Commission web presence to be more person-facing, focused on Commission’s value-added/value proposition, more than a document repository, and written for the web (more visual, more scan-able)
 - Redesign the look-and-feel of our policy documents to include a consistent design across policies that incorporates instructional and materials design principles
- Goal 4.2: Shape the future of accreditation by working with our SACSCOC member Institutions, C-RAC partners, CHEA, SHEEOs, legislators, and others with a common interest in promoting quality in higher education.
 - Create opportunities for new and continuing collaboration and dialogue
 - Identify shared values and priorities

Response #31: The MCAQD attempted to contact the citizen to clarify the intention of the comment. Several attempts were made, but the MCAQD was unable to contact the citizen. No revisions were made to the rule.

EXACT WORDING OF THE RULE

**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION VI – EMERGENCY EPISODES**

**RULE 600
EMERGENCY EPISODES**

INDEX

SECTION 100 – GENERAL

- 101 PURPOSE
- 102 EPISODE PROCEDURES GUIDELINES

SECTION 200 – DEFINITIONS

- 201 EMERGENCY EPISODE PLAN
- 202 POLLUTANT OF CONCERN

SECTION 300 – STANDARDS

- 301 EPISODE LEVEL CRITERIA

302 CONTROL ACTIONS – EMERGENCY EPISODE PLAN

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 EPISODE TERMINATION

402 COORDINATION WITH THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY

403 ACQUISITION OF FORECASTS

404 COMMUNICATION OF EMERGENCY EPISODES

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

501 RECORDKEEPING AND REPORTING

502 RECORDS RETENTION

503 RECORDS OF CONTROL ACTION

**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION VI - EMERGENCY EPISODES**

**RULE 600
EMERGENCY EPISODES**

SECTION 100 – GENERAL

- 101 PURPOSE:** To establish criteria used to determine when air pollution emergency episodes pollutant concentrations are significantly elevated and the to establish appropriate control actions to prevent the occurrence of ambient air pollutant concentrations which would cause significant harm to the health of persons. This rule describes control and advisory procedures reached at each of the three episode levels. The advisories described in this rule are not the same as a Health Watch or High Pollution Advisory issued by the Arizona Department of Environmental Quality (ADEQ). A Health Watch or High Pollution Advisory is issued when air pollution levels are expected to approach or exceed the federal health based air quality standards. The federal health based air quality standards are lower than the thresholds for air pollution alerts, warnings, and emergencies described in this rule.
- 102 EPISODE PROCEDURES GUIDELINES:** Guidelines for the procedures and communication steps to be followed during an air pollution episode are presented in this rule and in the Arizona Department of Environmental Quality’s “Procedures for Prevention of Emergency Episodes,” amended as of ~~October 18, 1988~~ August 2018 (and no future edition).

SECTION 200 – DEFINITIONS: For the purpose of this rule, the following definition 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 definition in this rule takes precedence.

- 201 EMERGENCY EPISODE PLAN:** A system designed to reduce the levels of air contaminants which may reach or have reached the level which may be harmful to health, and to protect that portion of the population at risk.
- 202 POLLUTANT OF CONCERN:** If an air quality alert, warning, or emergency is declared for:
- 202.1** Sulfur dioxide (SO₂), the pollutants of concern shall be sulfur oxides;
 - 202.2** PM₁₀, the pollutants of concern shall be PM₁₀ and PM_{2.5};
 - 202.3** PM_{2.5}, the pollutants of concern shall be PM_{2.5}, ammonia, volatile organic compounds (VOC), nitrogen oxides (NO_x), and SO₂;
 - 202.4** Ozone, the pollutants of concern shall be NO_x, VOC, and carbon monoxide (CO);
 - 202.5** Nitrogen dioxide (NO₂), the pollutants of concern shall be NO_x; and
 - 202.6** CO, the pollutant of concern shall be CO.

SECTION 300 – STANDARDS

301 EPISODE LEVEL CRITERIA: An air pollution alert, warning or emergency shall be declared when the following air pollutant concentrations are exceeded at any monitoring site and when meteorological conditions indicate that there will be a recurrence of those concentrations for the same pollutant(s) during the subsequent 24-hour period. The Control Officer's designated representative shall acquire air quality forecasts and meteorological data in accordance with Section 403 of this rule. The Control Officer shall declare air pollution alerts, warnings, and emergencies in accordance with the following criteria:

301.1 Air Pollution Alert: An air pollution alert shall be declared when any of the alert level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations for the same pollutant exceeding the alert level during the subsequent 24-hour period.

301.2 Air Pollution Warning: An air pollution warning shall be declared when any of the warning level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the warning level during the subsequent 24-hour period.

301.3 Air Pollution Emergency: An air pollution emergency shall be declared:

- a. When any of the emergency level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the emergency level during the subsequent 24-hour period; or
- b. If air pollution concentrations have not decreased below the warning level concentrations listed in Table 600-1 within 48-hours after the declaration of an air pollution warning.

**TABLE 600-1
EPISODE LEVEL CRITERIA AND SIGNIFICANT HARM LEVELS**

| Pollutant | EPISODE LEVEL CRITERIA | | | | Significant Harm Level |
|---|------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------|
| | Averaging Time | Alert | Warning | Emergency | |
| Sulfur Dioxide (ug/m ³) | 24-hr | 800 | 1,600 | 2,100 | <u>2,620</u> |
| Small Particulates (PM ₁₀) (ug/m ³) | 24-hr | 350 | 420 | 500 | <u>600</u> |
| Fine Particulates (PM _{2.5}) (ug/m ³) | 24-hr | 350 <u>140.5</u> | 420 <u>210.5</u> | 500 <u>280.5</u> | <u>350.5</u> |
| Total Particulates (ug/m ³) | 24-hr | 375 | 625 | 875 | |
| Sulfur Dioxide and Particulates Combined (ug/m ³) | 24-hr | 6.5x10 ⁴ | 26.1x10 ⁴ | 39.3x10 ⁴ | |
| Ozone (ug/m ³) | 1-hr | 400 (0.2 ppm) | 800 (0.4 ppm) | 1,000 (0.5 ppm) | <u>1,200</u> (0.6 ppm) |
| Nitrogen Dioxide (ug/m ³) | 1-hr | 1,130 | 2,260 | 3,000 | <u>3,750</u> |
| | 24-hr | 282 | 565 | 750 | <u>938</u> |
| Carbon Monoxide (mg/m ³) | 8-hr | 17 | 34 | 46 | <u>57.5</u> |

| EPISODE LEVEL CRITERIA | | | | | Significant Harm Level |
|------------------------|----------------|----------|-------------|-----------|------------------------|
| Pollutant | Averaging Time | Alert | Warning | Emergency | |
| | | (15 ppm) | (20 30 ppm) | (40 ppm) | (50 ppm) |
| | 4-hr | | | | 86.3 (75 ppm) |
| | 1-hr | | | | 144 (125 ppm) |

302 CONTROL ACTIONS – EMERGENCY EPISODE PLAN: ~~When an air pollution alert, warning or emergency has been declared, one or more of the control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area.~~

302.1 Control Actions – Air Pollution Alert: ~~When an air pollution alert has been declared, the following control actions, as applicable to the source(s) emitting the pollutant(s) of concern, shall be implemented as directed by the Control Officer:~~

- a. All permits to burn shall be suspended until further notice. The forest service shall be notified to postpone slash burning in affected areas.
- b. Incineration shall be limited to the hours of 12 noon to 4:00 p.m.
- c. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate alert stage control actions. Other sources~~ Sources operating pursuant to an air pollution control permit shall be notified to minimize emissions of the pollutant of concern by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12 noon to 4:00 p.m. This control action shall not be applicable to any operations that are necessary to protect public health, public safety, or public welfare.
- d. The public shall be requested to voluntarily ~~eliminate all unnecessary usage of restrict motor vehicles~~ vehicle use as much as possible.

302.2 Control Actions – Air Pollution Warning: ~~When an air pollution warning has been declared, the following control actions, as applicable to the source(s) emitting the pollutant(s) of concern, shall be implemented as directed by the Control Officer:~~

- a. Burning of ~~refuse~~, vegetation, trade wastes, and debris shall not be permitted by any person.
- b. Use of incinerators shall be prohibited.
- c. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the Arizona Air Pollution Control Implementation Plan shall be notified to initiate warning stage control actions. Other sources~~ Sources operating pursuant to an air pollution control permit shall be notified to initiate a 40 percent or greater reduction in actual emissions by curtailment or cessation of operations. All processing industries shall be requested to effect a maximum reduction in heat load demands. This control action shall not be applicable to

any operations that are necessary to protect public health, public safety, or public welfare.

- ~~d.~~ If possible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.
- e. **d.** Highway construction and paving activities shall be halted, unless it is technologically infeasible to do so. All soil removal or grading operations at other construction sites shall be postponed.
- ~~f.~~ ~~Dust producing crop preparation and cultivation activities shall be postponed. A maximum reduction in agricultural processing and handling operations shall be effected.~~
- g. **e.** ~~The public shall be requested to voluntarily reduce motor vehicle usage by use of carpools and other means of transportation and elimination of unnecessary operation.~~ Schools, businesses, industrial facilities, and government agencies shall be asked to limit activities as much as possible to reduce motor vehicle use.
f. As demand for electricity decreases, as a result of the cutbacks implemented in accordance with subsections 302.2(a) through (e) of this rule, the MCAQD shall contact the operators of power plants subject to Rule 322 to request emission reductions to minimize air pollution.

302.3 Control Actions – Air Pollution Emergency: When an air pollution emergency has been declared, the following control actions shall be implemented:

- ~~a.~~ ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the Arizona Air Pollution Control Implementation Plan shall be notified to initiate emergency stage control actions. Other manufacturing establishments Sources operating pursuant to an air pollution control permit shall cease operations as directed by the Governor, except those vital for public safety and welfare and enforcement of the emergency episode control actions.~~
- ~~b.~~ As directed by the Governor, all commercial, governmental, and institutional establishments, except those vital for public safety and welfare and enforcement of the emergency episode control actions, shall be closed.
- ~~c.~~ ~~Generating loads at power plants shall be reduced further, resulting from industrial and commercial cutbacks.~~
- ~~d.~~ **c.** All construction shall be halted as directed by the Governor except that which must proceed to avoid emergent physical harm.
- e. **d.** As directed by the Governor, use of motor vehicles shall be prohibited except in emergencies with approval of the local police.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 EPISODE TERMINATION: Once declared, any status reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

402 COORDINATION WITH THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY: When the conditions justifying the proclamation of an air pollution alert, warning, or emergency are determined to exist in any place in Maricopa County, the Control Officer shall be guided by the ~~following~~ criteria as established by state regulation ~~R18-2-219~~ R18-2-220 (Air Pollution Emergency Episodes), and shall cooperate directly with the State Director, Arizona Department of Environmental Quality in all pertinent areas of control, communication, and surveillance.

~~402.1 If the average wind speed for 24 hours is greater than 9.0 miles per hour, the criteria levels for particulates and sulfur dioxide and particulates combined shall not apply and no source control actions shall be taken.~~

~~402.2 If, after an alert or warning episode level has been declared, and air pollution concentrations and meteorological conditions do not deteriorate further, or improve after 48 hours and control actions have been taken, the next higher episode shall be declared and its associated control actions implemented.~~

403 ACQUISITION OF FORECASTS: The Control Officer's designated representative shall review air quality forecasts from ADEQ, weather forecasts and alerts from the National Weather Service (including atmospheric stagnation advisories, heat advisories, wind advisories, and high wind watches and warnings), and other reliable sources of meteorological data to determine if it is likely that the episode level criteria in Table 600-1 will be exceeded. The Control Officer will also use air quality forecasts, weather alerts, other reliable sources of meteorological data, and monitoring data to determine if a continuance or recurrence of alert level, warning level, or emergency level pollutant concentrations is likely.

404 COMMUNICATION OF EMERGENCY EPISODES: When an air pollution alert, warning, or emergency is declared, the Control Officer's designated representative will prepare a news release that describes the affected area, air pollutant concentrations, and meteorological conditions. The news release will also include control actions that will be implemented to reduce the concentration of pollutants in the ambient air and steps that individuals can take to reduce their exposure to pollutants in the ambient air. The news release will be distributed and/or announced using one or more of the following methods:

404.1 Press releases to electronic and print media;

404.2 Email and/or text messages;

404.3 Social media;

404.4 The Maricopa County Air Quality Department website; and

404.5 The Clean Air Make More website and mobile application.

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

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 designee upon request.

502 **RECORDS RETENTION:** Copies of reports, logs, and supporting documentation required by the Control Officer shall be retained for at least 5 years. Records and information required by this rule shall also be retained for at least 5 years.

503 **RECORDS OF CONTROL ACTION:** An owner or operator shall maintain a log of the control actions taken during an Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency.

Stakeholder Comments # 14 - 22

Subject: FW: Rule 600 Stakeholder Comments Review
Attachments: AQ-2017-010_Rule600-WorkingDraft SRP Comments 2021-06-02.docx

From: Watt Kristin L <Kristin.Watt@srpnet.com>
Sent: Monday, June 14, 2021 12:48 PM
To: Scott Kahldon (AQD) <Scott.Kahldon@maricopa.gov>; Marina.Estrella@aps.com
Cc: Kimberly Butler (AQD) <Kimberly.Butler@Maricopa.gov>; Gregory Verkamp (AQD) <Gregory.Verkamp@Maricopa.gov>
Subject: RE: Rule 600 Stakeholder Comments Review

Hi Scott,

Thank you again for providing SRP the opportunity to review Rule 600. Attached are some additional comments/feedback from SRP. I'm happy to discuss these in more detail if you'd prefer.

Thanks
Kristin

Kristin Watt

Manager, Air Quality Services

SRP | Environmental Services | PAB359

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From: Scott Kahldon (AQD) <Scott.Kahldon@maricopa.gov>
Sent: Tuesday, May 25, 2021 2:44 PM
To: Watt Kristin L <Kristin.Watt@srpnet.com>; Marina.Estrella@aps.com
Cc: Kimberly Butler (AQD) <Kimberly.Butler@Maricopa.gov>; Gregory Verkamp (AQD) <Gregory.Verkamp@Maricopa.gov>
Subject: Rule 600 Stakeholder Comments Review

CAUTION - EXTERNAL EMAIL

Phishing? **Click the fish** in Outlook
For mobile forward to phish@srpnet.com

Good Afternoon Marina and Kristin,

I'm working on Rule 600 and wanted to coordinate with both of you regarding the working draft and incorporated Stakeholder comments. The attached files contain the R600 working draft that includes EPA feedback and Stakeholder

comments along with the Stakeholder comments from Michael Denby. If your interested in reviewing any of the previous rulemaking documents pertaining to Rule 600, please visit the EROP Website and review the previous folder.

When you have an opportunity, please review the draft rule and let me know if you have any additional comments/feedback. We are planning on posting the second Notice of Proposed Rulemaking in July, so please provide your comments/feedback by June 14th.

If you have any additional questions, please let me know and we can schedule a meeting to further discuss.

Thanks,

Scott



Scott Kahldon • Senior Planner

Maricopa County Air Quality Department
3800 N. Central Avenue, Suite 1400 | Phoenix, AZ 85012

Desk: 602-506-6706 | **Cell:** 602-695-5728 | Scott.Kahldon@maricopa.gov

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**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION VI - EMERGENCY EPISODES**

**RULE 600
EMERGENCY EPISODES**

INDEX

SECTION 100 - GENERAL

- 101 PURPOSE
- 102 EPISODE PROCEDURES GUIDELINES

SECTION 200 – DEFINITIONS

- 201 EMERGENCY EPISODE PLAN
- 202 POLLUTANT OF CONCERN

SECTION 300 - STANDARDS

- 301 EPISODE LEVEL CRITERIA
- 302 CONTROL ACTIONS – EMERGENCY EPISODE PLAN

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

- 401 EPISODE TERMINATION
- 402 COORDINATION WITH THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY
- 403 ACQUISITION OF FORECASTS
- 404 COMMUNICATION OF EMERGENCY EPISODES

SECTION 500 - MONITORING AND RECORDS ~~(NOT INCLUDED)~~ **(NOT APPLICABLE)**



Revised 07/13/1988; Revised 02/03/2016; Revised MM/DD/YYYY

**MARICOPA COUNTY
 AIR POLLUTION CONTROL REGULATIONS
 REGULATION VI - EMERGENCY EPISODES**

**RULE 600
 EMERGENCY EPISODES**

SECTION 100 - GENERAL

101 PURPOSE: To establish criteria used to determine ~~when air pollution emergency episodes~~ pollutant concentrations are significantly elevated and the to establish appropriate control actions to prevent the occurrence of ambient air pollutant concentrations which would cause significant harm to the health of persons. ~~This rule describes control and advisory procedures reached at each of the three episode levels. The advisories described in this rule are not the same as a Health Watch or High Pollution Advisory issued by the Arizona Department of Environmental Quality (ADEQ). A Health Watch or High Pollution Advisory is issued when air pollution levels are expected to approach or exceed the federal health based air quality standards. The federal health based air quality standards are lower than the thresholds for air pollution alerts, warnings, and emergencies described in this rule.~~

102 EPISODE PROCEDURES GUIDELINES: Guidelines for the procedures and communication steps to be followed during an air pollution episode are presented in this rule and in the Arizona Department of Environmental Quality's "Procedures for Prevention of Emergency Episodes," amended as of ~~October 18, 1988~~ August 2018 (and no future edition).

SECTION 200 - DEFINITIONS: For the purpose of this rule, the following definition 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 definition in this rule takes precedence.

201 EMERGENCY EPISODE PLAN: A system designed to reduce the levels of air contaminants which may reach or have reached the level which may be harmful to health, and to protect that portion of the population at risk.

202 POLLUTANT OF CONCERN: If an air quality alert, warning, or emergency is declared for:

202.1 Sulfur dioxide (SO₂), the pollutants of concern shall be sulfur oxides;

202.2 PM₁₀, the pollutants of concern shall be PM₁₀ and PM_{2.5};

202.3 PM_{2.5}, the pollutants of concern shall be PM_{2.5}, ammonia, volatile organic compounds (VOC), nitrogen oxides (NO_x), and SO₂;

202.4 Ozone, the pollutants of concern shall be NO_x, VOC, and carbon monoxide (CO);

[Return to Comments #14 and #15](#)

Commented [WKL1]: Perhaps consider moving these to the definitions? It doesn't seem to really fit well in this paragraph.

Commented [WKL2]: In Section 101 above, the purpose is described as establishing criteria used to determine when air pollutant concentrations are significantly elevated and to establish appropriate control actions to prevent the occurrence of ambient air pollutant concentrations that would cause significant harm to the health of persons and the words "pollution emergency episodes" was struck, yet in this paragraph, the word "episodes" remains. Would it be more appropriate to change episodes to air pollutant concentrations are significantly elevated to align with the purpose of this rule?

Commented [KB-A3]: Added definition based on Stakeholder Comment.

[Return to Comment #16](#)

Commented [WKL4]: Is CO a pollutant of concern for Ozone?



202.5 Nitrogen dioxide (NO₂), the pollutants of concern shall be NO_x; and

202.6 CO, the pollutant of concern shall be CO.

SECTION 300 - STANDARDS

301 **EPISODE LEVEL CRITERIA:** An air pollution alert, warning or emergency shall be declared when the following air pollutant concentrations are exceeded at any monitoring site and when meteorological conditions indicate that there will be a recurrence of those concentrations for the same pollutant(s) during the subsequent 24-hour period. The Control Officer's designated representative shall acquire air quality forecasts and meteorological data in accordance with Section 403 of this rule. The Control Officer shall declare air pollution alerts, warnings, and emergencies in accordance with the following criteria:

Commented [KB-A5]: Added based on stakeholder comment

301.1 **Air Pollution Alert:** An air pollution alert shall be declared when any of the alert level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations for the same pollutant exceeding the alert level during the subsequent 24-hour period.

Commented [KB-A6]: Reworded based on stakeholder comment.

301.2 **Air Pollution Warning:** An air pollution warning shall be declared when any of the warning level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the warning level during the subsequent 24-hour period.

301.3 **Air Pollution Emergency:** An air pollution emergency shall be declared:

Commented [KB-A7]: Add "or" and revised based on stakeholder comment.

- a. When any of the emergency level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the emergency level during the subsequent 24-hour period;
or
- b. If air pollution concentrations have not decreased below the warning level concentrations listed in Table 600-1 within 48-hours after the declaration of an air pollution warning.

**TABLE 600-1
 EPISODE LEVEL CRITERIA AND SIGNIFICANT HARM LEVELS**

| Pollutant | EPISODE LEVEL CRITERIA | | | | Significant Harm Level |
|---|------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------|
| | Averaging Time | Alert | Warning | Emergency | |
| Sulfur Dioxide (ug/m ³) | 24-hr | 800 | 1,600 | 2,100 | <u>2,620</u> |
| Small Particulates (PM ₁₀) (ug/m ³) | 24-hr | 350 | 420 | 500 | <u>600</u> |
| Fine Particulates (PM _{2.5}) (ug/m ³) | 24-hr | 350 <u>140.5</u> | 420 <u>210.5</u> | 500 <u>280.5</u> | <u>350.5</u> |
| Total Particulates (ug/m ³) | 24-hr | 375 | 625 | 875 | |



| EPISODE LEVEL CRITERIA | | | | | Significant Harm Level |
|---|----------------|---------------------|----------------------------------|----------------------|----------------------------------|
| Pollutant | Averaging Time | Alert | Warning | Emergency | |
| Sulfur Dioxide and Particulates Combined (ug/m ³) | 24-hr | 6.5x10 ⁴ | 26.1x10 ⁴ | 39.3x10 ⁴ | |
| Ozone (ug/m ³) | 1-hr | 400 (0.2 ppm) | 800 (0.4 ppm) | 1,000 (0.5 ppm) | <u>1,200</u> <u>(0.6 ppm)</u> |
| Nitrogen Dioxide (ug/m ³) | 1-hr | 1,130 | 2,260 | 3,000 | <u>3,750</u> |
| | 24-hr | 282 | 565 | 750 | <u>938</u> |
| Carbon Monoxide (mg/m ³) | 8-hr | 17 (15 ppm) | 34 (20) 30 ppm) | 46 (40 ppm) | <u>57.5</u> <u>(50 ppm)</u> |
| | 4-hr | | | | <u>86.3</u> <u>(75 ppm)</u> |
| | 1-hr | | | | <u>144</u> <u>(125 ppm)</u> |

302 CONTROL ACTIONS – EMERGENCY EPISODE PLAN: ~~When an air pollution alert, warning or emergency has been declared, one or more of the control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area.~~

302.1 Control Actions—Air Pollution Alert: ~~When an air pollution alert has been declared, the following control actions, as applicable to the source(s) emitting the pollutant(s) of concern, shall be implemented as directed by the Control Officer:~~

- a. All permits to burn shall be suspended until further notice. The forest service shall be notified to postpone slash burning in affected areas.
- b. Incineration shall be limited to the hours of 12 noon to 4:00 p.m.
- c. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate alert stage control actions. Other sources~~ Sources operating pursuant to an air pollution control permit, excluding power plants subject to Rule 322 and emergency engines subject to Rule 324, shall be notified to minimize emissions of the pollutant of concern by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12 noon to 4:00 p.m. ~~This control action shall not be applicable to any operations that are necessary to protect public health, public safety, or public welfare.~~
- d. The public shall be requested to voluntarily ~~eliminate all unnecessary usage of restrict motor vehicles~~ vehicle use as much as possible.

302.2 Control Actions—Air Pollution Warning: ~~When an air pollution warning has been declared, the following control actions, as applicable to the source(s) emitting the pollutant(s) of concern, shall be implemented as directed by the Control Officer:~~



- a. Burning of ~~refuse~~, vegetation, trade wastes, and debris shall not be permitted by any person.
- b. Use of incinerators shall be prohibited.
- c. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the Arizona Air Pollution Control Implementation Plan shall be notified to initiate warning stage control actions. Other sources~~ Sources operating pursuant to an air pollution control permit, excluding power plants subject to Rule 322 and emergency engines subject to Rule 324, shall be notified to initiate a 40 percent or greater reduction in emissions by curtailment or cessation of operations. All processing industries shall be requested to effect a maximum reduction in heat load demands. This control action shall not be applicable to any operations that are necessary to protect public health, public safety, or public welfare.
- d. ~~If possible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.~~
- e. d. Highway construction and paving activities shall be halted, unless it is technologically infeasible to do so. All soil removal or grading operations at other construction sites shall be postponed.
- f. ~~Dust producing crop preparation and cultivation activities shall be postponed. A maximum reduction in agricultural processing and handling operations shall be effected.~~
- g. e. The public shall be requested to voluntarily reduce motor vehicle usage by use of carpools and other means of transportation and elimination of unnecessary operation. Schools, businesses, industrial facilities, and government agencies shall be asked to limit activities as much as possible to reduce motor vehicle use.
- f. As demand for electricity decreases, as a result of the cutbacks implemented in accordance with subsections 302.2(a) through (e) of this rule, the MCAQD shall contact the operators of power plants subject to Rule 322 to request emission reductions.

302.3 ~~Control Actions—Air Pollution Emergency: When an air pollution emergency has been declared, the following control actions shall be implemented:~~

- a. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the Arizona Air Pollution Control Implementation Plan shall be notified to initiate emergency stage control actions. Other manufacturing establishments~~ Sources operating pursuant to an air pollution control permit shall cease operations as directed by the Governor.
- b. As directed by the Governor, all commercial, governmental, and institutional establishments, except those vital for public safety and welfare and enforcement of the emergency episode control actions, shall be closed.

[Return to Comment #17](#)

Commented [WKL8]: How do sources measure this? Is a 40% reduction from permitting limits, or from actual emissions?

[Return to Comment #18](#)

Commented [WKL9]: Recommend not removing this control measure. If it's a PM10 episode, it would be helpful if this activity would be able to be postponed.

[Return to Comment #19](#)

Commented [WKL10]: This is a bit vague. How does MCAQD define "as demand for electricity decreases"? Who decides what reduced demand means? Is it when customer demand decreases? Also, this is dependent upon the pollutant of concern? Suggest taking this out entirely, or suggest language that says "shall reduce emissions as much as possible"...Or power plants subject to Rule 322 will ensure implementation of best management practices to minimize air pollution...

Commented [WKL11]: This is a bit vague also, Can MCAQD clarify what a request for emissions reductions look like? See above comment.

[Return to Comment #20](#)

Commented [WKL12]: To me, this means if the Governor directs us, SRP shall stop operating it's generating units.



- e. ~~Generating loads at power plants shall be reduced further, resulting from industrial and commercial outbacks.~~
- d. ~~c.~~ All construction shall be halted as directed by the Governor except that which must proceed to avoid emergent physical harm.
- e. ~~d.~~ As directed by the Governor, use of motor vehicles shall be prohibited except in emergencies with approval of the local police.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

401 EPISODE TERMINATION: Once declared, any status reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

402 COORDINATION WITH THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY: When the conditions justifying the proclamation of an air pollution alert, warning, or emergency are determined to exist in any place in Maricopa County, the Control Officer shall be guided by the ~~following~~ criteria as established by state regulation ~~R18-2-219~~ R18-2-220 (Air Pollution Emergency Episodes), and shall cooperate directly with the State Director, Arizona Department of Environmental Quality in all pertinent areas of control, communication, and surveillance.

~~402.1 If the average wind speed for 24 hours is greater than 9.0 miles per hour, the criteria levels for particulates and sulfur dioxide and particulates combined shall not apply and no source control actions shall be taken.~~

~~402.2 If, after an alert or warning episode level has been declared, and air pollution concentrations and meteorological conditions do not deteriorate further, or improve after 48 hours and control actions have been taken, the next higher episode shall be declared and its associated control actions implemented.~~

403 ACQUISITION OF FORECASTS: The Control Officer's designated representative shall review air quality forecasts from ADEQ, weather alerts from the National Weather Service (including atmospheric stagnation advisories, heat advisories, wind advisories, and high wind watches and warnings), and other reliable sources of meteorological data to determine if it is likely that the episode level criteria in Table 600-1 will be exceeded. The Control Officer will also use air quality forecasts, weather alerts, other reliable sources of meteorological data, and monitoring data to determine if a continuance or recurrence of alert level, warning level, or emergency level pollutant concentrations is likely.

404 COMMUNICATION OF EMERGENCY EPISODES: When an air pollution alert, warning, or emergency is declared, the Control Officer's designated representative will prepare a news release that describes the affected area, pollutant concentrations, emissions, and meteorological conditions. The news release will also include control actions that will be implemented to reduce the concentration of pollutants in the ambient air and steps that individuals can take to reduce their exposure to pollutants in the ambient air. The news release will be distributed and/or announced using one or more of the following methods:

404.1 Press releases to electronic and print media;

[Return to Comment #21](#)

Commented [WKL13]: Perhaps add the word forecasts from NWS?

[Return to Comment #22](#)

Commented [WKL14]: Whose emissions? Do you mean pollutant concentrations in the air?



404.2 Email and/or text messages;

404.3 Social media;

404.4 The Maricopa County Air Quality Department website; and

404.5 The Clean Air Make More website and mobile application.

SECTION 500 - MONITORING AND RECORDS ~~(NOT INCLUDED)~~ (NOT APPLICABLE)

Stakeholder Comments 23 through 30

(except for comment 26 which was provided in a related email)

Subject: FW: Rule 600 Comments
Attachments: 2020.06.Rule600.APS Comments.docx

From: Anne.Carlton@aps.com <Anne.Carlton@aps.com>
Sent: Monday, June 14, 2021 4:24 PM
To: Scott Kahldon (AQD) <Scott.Kahldon@maricopa.gov>
Cc: James.D.Edwards@aps.com; Marina.Estrella@aps.com
Subject: Rule 600 Comments

Hello Scott,

Thank you so much for the opportunity to provide feedback on Rule 600. Attached you will find our comments to the proposed language. Please feel free to reach out if you have any questions or would like to discuss in more detail.

Thank you,

Anne Carlton
Manager, Environmental Support
480-322-9313 Cell
Arizona Public Service



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**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION VI - EMERGENCY EPISODES**

**RULE 600
EMERGENCY EPISODES**

INDEX

SECTION 100 - GENERAL

- 101 PURPOSE
- 102 EPISODE PROCEDURES GUIDELINES

SECTION 200 – DEFINITIONS

- 201 EMERGENCY EPISODE PLAN
- 202 POLLUTANT OF CONCERN

SECTION 300 - STANDARDS

- 301 EPISODE LEVEL CRITERIA
- 302 CONTROL ACTIONS – EMERGENCY EPISODE PLAN

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

- 401 EPISODE TERMINATION
- 402 COORDINATION WITH THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY
- 403 ACQUISITION OF FORECASTS
- 404 COMMUNICATION OF EMERGENCY EPISODES

SECTION 500 - MONITORING AND RECORDS ~~(NOT INCLUDED)~~ **(NOT APPLICABLE)**



Revised 07/13/1988; Revised 02/03/2016; Revised MM/DD/YYYY

**MARICOPA COUNTY
 AIR POLLUTION CONTROL REGULATIONS
 REGULATION VI - EMERGENCY EPISODES**

**RULE 600
 EMERGENCY EPISODES**

SECTION 100 - GENERAL

101 PURPOSE: To establish criteria used to determine when air pollution emergency episodes pollutant concentrations are significantly elevated (i.e. pollution emergency episodes) and the to establish appropriate control actions to prevent the occurrence of ambient air pollutant concentrations which would cause significant harm to the health of persons. This rule describes control and advisory procedures reached at each of the three episode levels. The advisories described in this rule are not the same as a Health Watch or High Pollution Advisory issued by the Arizona Department of Environmental Quality (ADEQ). A Health Watch or High Pollution Advisory is issued when air pollution levels are expected to approach or exceed the federal health based air quality standards. The federal health based air quality standards are lower than the thresholds for air pollution alerts, warnings, and emergencies described in this rule.

102 EPISODE PROCEDURES GUIDELINES: Guidelines for the procedures and communication steps to be followed during an air pollution episode are presented in this rule and in the Arizona Department of Environmental Quality’s “Procedures for Prevention of Emergency Episodes,” amended as of October 18, 1988 August 2018 (and no future edition).

SECTION 200 - DEFINITIONS: For the purpose of this rule, the following definition 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 definition in this rule takes precedence.

201 EMERGENCY EPISODE PLAN: A system designed to reduce the levels of air contaminants which may reach or have reached the level which may be harmful to health, and to protect that portion of the population at risk.

202 POLLUTANT OF CONCERN: If an air quality alert, warning, or emergency is declared for:

202.1 Sulfur dioxide (SO₂), the pollutants of concern shall be sulfur oxides;

202.2 PM₁₀, the pollutants of concern shall be PM₁₀ and PM_{2.5};

202.3 PM_{2.5}, the pollutants of concern shall be PM_{2.5}, ammonia, volatile organic compounds (VOC), nitrogen oxides (NO_x), and SO₂;

[Return to Comment #23](#)

Commented [CB1]: Since episode is used throughout the document, it may be helpful to add this term within the section

Commented [KB-A2]: Added definition based on Stakeholder Comment.



[Return to Comment #24](#)

202.4 Ozone, the pollutants of concern shall be NO_x, VOC, and carbon monoxide (CO).

Commented [CAB3]: Why is CO listed here?

202.5 Nitrogen dioxide (NO₂), the pollutants of concern shall be NO_x; and

202.6 CO, the pollutant of concern shall be CO.

SECTION 300 - STANDARDS

301 **EPISODE LEVEL CRITERIA:** An air pollution alert, warning or emergency shall be declared when the following air pollutant concentrations are exceeded at any monitoring site and when meteorological conditions indicate that there will be a recurrence of those concentrations for the same pollutant(s) during the subsequent 24-hour period. The Control Officer's designated representative shall acquire air quality forecasts and meteorological data in accordance with Section 403 of this rule. The Control Officer shall declare air pollution alerts, warnings, and emergencies in accordance with the following criteria:

Commented [KB-A4]: Added based on stakeholder comment

301.1 **Air Pollution Alert:** An air pollution alert shall be declared when any of the alert level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations for the same pollutant exceeding the alert level during the subsequent 24-hour period.

Commented [KB-A5]: Reworded based on stakeholder comment.

301.2 **Air Pollution Warning:** An air pollution warning shall be declared when any of the warning level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the warning level during the subsequent 24-hour period.

301.3 **Air Pollution Emergency:** An air pollution emergency shall be declared:

Commented [KB-A6]: Add "or" and revised based on stakeholder comment.

- a.** When any of the emergency level concentrations listed in Table 600-1 are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the emergency level during the subsequent 24-hour period;
or
- b.** If air pollution concentrations have not decreased below the warning level concentrations listed in Table 600-1 within 48-hours after the declaration of an air pollution warning.

**TABLE 600-1
 EPISODE LEVEL CRITERIA AND SIGNIFICANT HARM LEVELS**

| Pollutant | EPISODE LEVEL CRITERIA | | | | Significant Harm Level |
|---|------------------------|-------|---------|-----------|------------------------|
| | Averaging Time | Alert | Warning | Emergency | |
| Sulfur Dioxide (ug/m ³) | 24-hr | 800 | 1,600 | 2,100 | <u>2,620</u> |
| Small Particulates (PM ₁₀) (ug/m ³) | 24-hr | 350 | 420 | 500 | <u>600</u> |



| EPISODE LEVEL CRITERIA | | | | | Significant Harm Level |
|---|------------------|----------------------|-------------------------------|----------------------|-------------------------------|
| Pollutant | Averaging Time | Alert | Warning | Emergency | |
| Fine Particulates (PM _{2.5}) (ug/m ³) | 24-hr | 350 140.5 | 420 210.5 | 500 280.5 | 350.5 |
| Total Particulates (ug/m ³) | 24-hr | 375 | 625 | 875 | |
| Sulfur Dioxide and Particulates Combined (ug/m ³) | 24-hr | 6.5x10 ⁺ | 26.1x10 ⁺ | 39.3x10 ⁺ | |
| Ozone (ug/m ³) | 1-hr | 400 (0.2 ppm) | 800 (0.4 ppm) | 1,000 (0.5 ppm) | 1,200 (0.6 ppm) |
| Nitrogen Dioxide (ug/m ³) | 1-hr | 1,130 | 2,260 | 3,000 | 3,750 |
| | 24-hr | 282 | 565 | 750 | 938 |
| Carbon Monoxide (mg/m ³) | 8-hr | 17 (15 ppm) | 34 (20 30 ppm) | 46 (40 ppm) | 57.5 (50 ppm) |
| | 4-hr | | | | 86.3 (75 ppm) |
| | 1-hr | | | | 144 (125 ppm) |

302 **CONTROL ACTIONS – EMERGENCY EPISODE PLAN:** When an air pollution alert, warning or emergency has been declared, one or more of the control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area.

302.1 **Control Actions – Air Pollution Alert:** When an air pollution alert has been declared, the following control actions, as applicable to the source(s) emitting the pollutant(s) of concern, shall be implemented as directed by the Control Officer:

- a. All permits to burn shall be suspended until further notice. The forest service shall be notified to postpone slash burning in affected areas.
- b. Incineration shall be limited to the hours of 12 noon to 4:00 p.m.
- c. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate alert stage control actions. Other sources~~ Sources operating pursuant to an air pollution control permit, ~~excluding power plants subject to Rule 322 and emergency engines subject to Rule 324,~~ shall be notified to minimize emissions of the pollutant of concern by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12 noon to 4:00 p.m. ~~This control action shall not be applicable to any operations that are necessary to protect public health, public safety, or public welfare.~~
- d. The public shall be requested to voluntarily eliminate all unnecessary usage of ~~restrict motor vehicles vehicle use as much as possible.~~

[Return to Comment #25](#)

Commented [CAB7]: Rather than listing 2 specific rules, consider using verbiage related to essential public service (see Southcoast Air Pollution Emergency Contingency Actions). There are other services that may need to operate to ensure public safety – One example are our microgrids – non-emergency engines that operate under Rule 324. As written, operation of these units would be limited even if they are deemed necessary to maintain grid stability.

Clearly, the last sentence of this section capture this -



302.2 ~~Control Actions~~—Air Pollution Warning: When an air pollution warning has been declared, the following control actions, as applicable to the source(s) emitting the pollutant(s) of concern, shall be implemented as directed by the Control Officer:

- a. Burning of ~~refuse~~, vegetation, trade wastes, and debris shall not be permitted by any person.
- b. Use of incinerators shall be prohibited.
- c. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the Arizona Air Pollution Control Implementation Plan shall be notified to initiate warning stage control actions. Other sources~~ Sources operating pursuant to an air pollution control permit, excluding power plants subject to Rule 322 and emergency engines subject to Rule 324, shall be notified to initiate a 40 percent or greater reduction in emissions by curtailment or cessation of operations. All processing industries shall be requested to effect a maximum reduction in heat load demands. This control action shall not be applicable to any operations that are necessary to protect public health, public safety, or public welfare.
- d. ~~If possible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.~~
- e. ~~d.~~ Highway construction and paving activities shall be halted, unless it is technologically infeasible to do so. All soil removal or grading operations at other construction sites shall be postponed.
- f. ~~Dust producing crop preparation and cultivation activities shall be postponed. A maximum reduction in agricultural processing and handling operations shall be effected.~~
- g. ~~e.~~ The public shall be requested to voluntarily reduce motor vehicle usage by use of carpools and other means of transportation and elimination of unnecessary operation. Schools, businesses, industrial facilities, and government agencies shall be asked to limit activities as much as possible to reduce motor vehicle use.
- f. As demand for electricity decreases, as a result of the cutbacks implemented in accordance with subsections 302.2(a) through (e) of this rule, the MCAQD shall contact the operators of power plants subject to Rule 322 to request emission reductions.

302.3 ~~Control Actions~~—Air Pollution Emergency: When an air pollution emergency has been declared, the following control actions shall be implemented:

- a. ~~Those manufacturing facilities with prearranged emission reduction plans as noted in the Arizona Air Pollution Control Implementation Plan shall be notified to initiate emergency stage control actions. Other manufacturing establishments~~ Sources operating pursuant to an air pollution control permit shall cease operations as directed by the Governor.

[Return to Comment #27](#)

Commented [CAB8]: Same comment as above –

If language related to Rule 322 is kept in Rule 600, it needs to be made clear units complying with Rule 322 by taking operational limits (<10% capacity factor). Again, I would say that the last sentence would suffice since electricity would be considered operation necessary to protect public safety

Commented [CAB9]: This rule has not monitoring or recordkeeping requirements noted. Am I correct to interpret that facilities would not be required to maintain records related to their emission reductions?

[Return to Comment #28](#)

[Return to Comment #29](#)

Commented [CAB10]: I think it is important to note that generation of electricity always follows demand – this occurs within minutes. It is also important to note, that decreased demands within Maricopa County, does not always equal decreased demands on the system. The grid is maintained at a much larger level than county based geography, so units within Maricopa County may be need to help support the western loop.

I am not opposed to the language since it states the agency will request the emission reductions, but it is unnecessary.

Commented [CAB11]: Include language related excluding operations necessary to maintain public safety.

[Return to Comment #30](#)



- b. As directed by the Governor, all commercial, governmental, and institutional establishments, except those vital for public safety and welfare and enforcement of the emergency episode control actions, shall be closed.
- e. ~~Generating loads at power plants shall be reduced further, resulting from industrial and commercial cutbacks.~~
- d. ~~c.~~ All construction shall be halted as directed by the Governor except that which must proceed to avoid emergent physical harm.
- e. ~~d.~~ As directed by the Governor, use of motor vehicles shall be prohibited except in emergencies with approval of the local police.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

- 401 EPISODE TERMINATION:** Once declared, any status reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.
- 402 COORDINATION WITH THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY:** When the conditions justifying the proclamation of an air pollution alert, warning, or emergency are determined to exist in any place in Maricopa County, the Control Officer shall be guided by the ~~following criteria as~~ established by state regulation ~~R18-2-219~~ R18-2-220 (Air Pollution Emergency Episodes), and shall cooperate directly with the State Director, Arizona Department of Environmental Quality in all pertinent areas of control, communication, and surveillance.
- 402.1 ~~If the average wind speed for 24 hours is greater than 9.0 miles per hour, the criteria levels for particulates and sulfur dioxide and particulates combined shall not apply and no source control actions shall be taken.~~
- 402.2 ~~If, after an alert or warning episode level has been declared, and air pollution concentrations and meteorological conditions do not deteriorate further, or improve after 48 hours and control actions have been taken, the next higher episode shall be declared and its associated control actions implemented.~~
- 403 ACQUISITION OF FORECASTS:** The Control Officer's designated representative shall review air quality forecasts from ADEQ, weather alerts from the National Weather Service (including atmospheric stagnation advisories, heat advisories, wind advisories, and high wind watches and warnings), and other reliable sources of meteorological data to determine if it is likely that the episode level criteria in Table 600-1 will be exceeded. The Control Officer will also use air quality forecasts, weather alerts, other reliable sources of meteorological data, and monitoring data to determine if a continuance or recurrence of alert level, warning level, or emergency level pollutant concentrations is likely.
- 404 COMMUNICATION OF EMERGENCY EPISODES:** When an air pollution alert, warning, or emergency is declared, the Control Officer's designated representative will prepare a news release that describes the affected area, pollutant concentrations, emissions, and meteorological conditions. The news release will also include control actions that will be implemented to reduce the concentration of pollutants in the ambient air and steps that



individuals can take to reduce their exposure to pollutants in the ambient air. The news release will be distributed and/or announced using one or more of the following methods:

404.1 Press releases to electronic and print media;

404.2 Email and/or text messages;

404.3 Social media;

404.4 The Maricopa County Air Quality Department website; and

404.5 The Clean Air Make More website and mobile application.

SECTION 500 - MONITORING AND RECORDS (NOT INCLUDED) (NOT APPLICABLE)