BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

IN THE MATTER OF AMENDMENTS TO)	
REGULATION NO. 19, REGULATIONS OF THE)	DOCKET NO. 14-010 R
ARKANSAS PLAN OF IMPLEMENTATION FOR)	
AIR POLLUTION CONTROL)	

RESPONSIVE SUMMARY FOR REGULATION NO. 19, REGULATIONS OF THE ARKANSAS PLAN OF IMPLEMENTATION FOR AIR POLLUTION CONTROL

Pursuant to Arkansas Code Annotated (Ark. Code Ann.) § 8-4-202(d)(4)(C) and Regulation¹ No. 8.815, the Arkansas Pollution Control and Ecology Commission (Commission, APC&EC) shall cause to be prepared a responsive summary, which groups public comments into similar categories and explains why the Commenters' rationale for each category is accepted or rejected.

On November 21, 2014, the Arkansas Department of Environmental Quality (Department, ADEQ) filed a Petition to Initiate Rulemaking to Amend Regulation No. 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control. Administrative Law Judge Charles Moulton conducted a public hearing on January 12, 2015. The following is a summary of the comments regarding the proposed amendments to Regulation No. 19 along with the Commission's response.

<u>Comment 1:</u> The U.S. Environmental Protection Agency (EPA) understands that the proposed addition of Reg. 19.305 establishes tiered air quality analysis requirements based on the type of permit action being taken and is intended to meet the State Implementation Plan (SIP)-approved Reg. 19.405 requirement that the Arkansas Department of Environmental Quality (ADEQ or Department) technical review should ensure that "the stationary source will be constructed or modified to operate without interfering with attainment or maintenance of a national ambient air quality standard (NAAQS)."

1

¹ All citations of and references to state environmental regulations contained in this document signify those regulations promulgated by the Arkansas Pollution Control and Ecology Commission.

While EPA agrees with the basic elements of the proposed approach that allows for both qualitative or quantitative analyses, depending on the project-specific conditions, EPA has determined that the proposed addition of Reg. 19.305 is potentially not approvable into the Arkansas SIP because it does not ensure that all sources permitted under the Minor New Source Review (NSR) Program will not cause or contribute to a NAAQS violation or interfere with the maintenance of the NAAQS. EPA states that most Minor NSR programs rely on the permitting authority's ability to utilize both qualitative and quantitative air quality analyses, including air dispersion modeling, on a case-by-case basis to demonstrate NAAQS compliance. EPA explains that these analyses may be conducted by the permit applicant or the permitting authority as needed.

EPA states that Reg. 19.305, as proposed by ADEQ, includes a tiered approach that restricts qualitative and quantitative analyses to specific cases and does not allow the Department to require or rely upon these analyses for all Minor NSR permitting actions. EPA explains that because the tiered approach does not allow for case-by-case NAAQS demonstrations, ADEQ needs to demonstrate how all sources permitted under the Minor NSR Program will not cause or contribute to a NAAQS violation or interfere with the maintenance of the NAAQS. EPA states that ADEQ may achieve this by providing a detailed analysis and supporting documentation, such as generic air quality modeling, to demonstrate that all sources permitted under the Minor NSR program will not interfere with NAAQS attainment or maintenance for all NAAQS.

In addition, EPA states that the proposed tiered air quality analysis approach must address the intervals upon which ADEQ will review and update the information relied upon to develop the proposed regulations. The frequency of ADEQ review and resulting updates made to the information relied upon to develop the proposed regulations are necessary to ensure that the supporting information does not become outdated, and therefore not representative of current air quality conditions. EPA asks if ADEQ will update the rules or modeling and technical analyses that the rules rely upon if the EPA releases new NAAQS standards or does ADEQ anticipate regular or periodic updates? Without this supporting information, the proposed provisions found in Reg. 19.305 are potentially not approvable as revisions to the Arkansas SIP.

Response 1: Due to this and other Comments, ADEQ will withdraw the proposed language in Reg. 19.305.

Under EPA SIP-approved Reg. 19.405, the Department reviews Minor NSR permit applications to ensure, to the reasonable satisfaction of the Department, that any proposed stationary source that will be constructed or modified will operate without interfering with attainment of the NAAQS. Pursuant to Reg. 19.402, the Department will not grant a permit unless the owner/operator demonstrates to the reasonable satisfaction of the Department that the stationary source will be constructed or modified to operate without interfering with the attainment or

maintenance of the NAAQS. The Department is in the process of determining what pollutant-specific or facility-specific NAAQS evaluation requirements will be required for non-PSD permitting actions pursuant to Reg. 19.402 and Reg. 19.405. The Department anticipates that these NAAQS evaluation requirements will be included in the subsequent NAAQS SIP that the State will submit to EPA. ADEQ is also developing a technical analysis to support its NAAQS evaluation requirements for non-PSD permitting and anticipates submitting the results of this analysis with the SIP submission.

Structuring the minor NSR NAAQS review process based on the Department's determination as to what evaluation requirements are necessary to ensure that stationary source construction and modification activities do not interfere with attainment of the NAAQS is consistent with 74 FR 51422 (October 6, 2009) which states: "The minor NSR program is part of each State's 'State Implementation Plan' (SIP) and is designated to ensure that the construction or modification of any stationary source does not interfere with the attainment of the NAAQS. Aside from this requirement, which is stated in broad terms, the Act includes no specifics regarding the structure or functioning of minor NSR programs." Furthermore, the Department has the authority under Reg. 19.402 and under Arkansas Code Annotated (Ark. Code Ann.) § 8-4-318 (b)(3) to establish provisions in the NAAQS SIP regarding types of evaluations required for non-PSD permitting actions.

See Responses 2(b)(iv) and 2(b)(v).

<u>Comment 2:</u> EPA has several specific questions regarding the implementation of the proposed tiered air quality analysis approach and how it will ensure protection of the NAAQS consistent with federal requirements and requirements of the current Arkansas SIP. EPA requests that ADEQ provide answers to these questions and any referenced supporting information, since it will be necessary for EPA to determine if the proposed tiered air quality analysis requirements are consistent with applicable requirements. Based on EPA's review of the proposed revisions at this time, the tiered air quality analysis requirements are potentially not approvable into the SIP without additional analysis and supporting information to show that the proposed approach ensures that all sources permitted under Regulation No. 19 do not interfere with NAAQS attainment or maintenance.

2(a): Reg. 19.305(A) states that new constructions or modifications with proposed emission increases less than the De Minimis thresholds contained in Reg. 19.407(C) are not required to include an air quality analysis because the resulting environmental impact is "trivial." While EPA agrees that certain permit actions could be exempt from including a case-specific air quality analysis on the basis that the impacts are expected to be small and will not adversely impact ambient air, this type of exclusion must be evaluated and technically supported by a quantitative analysis, such as generic air quality modeling, clearly demonstrating the negligible impacts from

emissions below the proposed thresholds. De Minimis levels established to protect current NAAQS may not be protective for future NAAQS. EPA points out that, ordinarily, a state's ability to require case-by-case air quality analyses could address this concern. Given the restriction imposed on the state to require or conduct such analyses, EPA states that ADEQ needs to address how this concern will be resolved over time (i.e. would the De Minimis thresholds become null and void by operation of state law in the event of a change to the NAAQS?). This information should be included as part of the state's rulemaking and subsequent SIP revision development.

Furthermore, EPA states that the De Minimis thresholds contained in the state's current version of Reg. 19.407(C) are not approved as part of the current Arkansas SIP. The ADEQ needs to provide additional technical information, including the described quantitative analysis, to demonstrate that proposed changes with emissions increases less than the referenced thresholds will not cause or contribute to a violation of the NAAQS or interfere with the maintenance of the NAAQS.

Response 2(a): Due to this and other Comments, ADEQ will withdraw the proposed language in Reg. 19.305.

The Department anticipates submitting additional technical information, including the described quantitative analysis, to support the De Minimis level thresholds contained in Reg. 19.407(C). On July 10, 2015, ADEQ submitted a draft monitoring based demonstration which discussed an analysis of trends in ambient air concentrations for those pollutants for which the permit thresholds and De Minimis levels were revised in a 2010 Permit Threshold SIP revision. According to the monitoring data, air quality with respect to those pollutants has improved in the years following the permit threshold and De Minimis level revisions. Based on this analysis, the Department has determined that the De Minimis levels in 19.407(C) are sufficiently protective of the NAAQS. The Department has also engaged with stakeholders and its modeling contractor, ICF, to perform a modeling exercise, which demonstrates that the worst case scenario of adding a source with realistic, median stack parameters and emissions equal to the De Minimis levels will not interfere with the attainment of the NAAQS anywhere in the State. The Department anticipates submitting a final technical support document containing the monitoring based and modeling based demonstrations to EPA.

It is the practice of the Department to revise its regulations and SIPs when EPA finalizes new standards. Under CAA 110(a)(1), each state has three years after the promulgation of a new or revised NAAQS to submit a plan for implementation, maintenance, and enforcement of the standard. If it becomes necessary to revise the De Minimis thresholds because of a change to the NAAQS, the current De Minimis thresholds will remain in effect until a new revised rulemaking, in which changes to the thresholds are proposed, becomes effective. If revisions to the De

Minimis thresholds are determined necessary to implement a revised NAAQS and are adopted by the Arkansas Pollution Control & Ecology Commission (APC&EC), the Department will submit these revisions to EPA as part of a SIP revision.

2(b): EPA points out that Reg. 19.305(D) states that for permit actions requiring an air quality analysis under Section 305, the analysis may be qualitative in nature unless "the need has been demonstrated and specific criteria adopted... in the applicable NAAQS SIP" to require air dispersion modeling. In those cases where a need has been demonstrated, the Director may conduct modeling instead of a qualitative air quality analysis to ensure that the proposed permit action does not interfere with NAAQS attainment or maintenance. EPA agrees that an air quality analysis in support of a Minor NSR permit action may be qualitative or quantitative in nature depending on the project, and location-specific details. However, EPA states that, as proposed, Reg. 19.305(D) appears to be very restrictive regarding when quantitative air dispersion modeling may be required or conducted by the Director. EPA has several questions regarding the implementation of this proposed approach and how the ADEQ will ensure that the permitting process is protective of the NAAQS given the proposed restrictions. EPA requests that ADEQ provide answers to the following questions and any supporting information that the responses rely upon.

Based on our current review of the proposed revisions, the tiered air quality analysis approach that relies on future NAAQS SIP development is potentially not approvable for several reasons. It restricts the ADEQ's ability to require or conduct quantitative analyses to certain prescribed hypothetical situations that are not yet known or clearly defined. This results in the inability to determine NAAQS compliance on a case-by-case basis and is not consistent with current SIP-approved and federal requirements that require the ADEQ's determination that each permit action not interfere with the attainment or maintenance of the NAAQS.

2(b)(i): What is the bar to establish that a "need has been demonstrated?" Provide additional information regarding what is considered to be a "need" and how that need is determined based on NAAQS SIP development.

Response 2(b)(i): See Response 1.

2(b)(ii): Will the NAAQS SIP development rely on state-wide modeling currently under development by the ADEQ? If so, how and with what frequency will the regional scale state-wide modeling be applied and updated to account for local-scale facility-specific impacts and new sources?

Response 2(b)(ii): ADEQ is still investigating the possibility of using state-wide modeling to determine NAAQS evaluation requirements for new and modified sources and is in the process

of developing a credible approach. Once such an approach is implemented, ADEQ would likely update the regional scale statewide modeling every three years.

No revisions to the final rule are necessary due to this Comment.

2(b)(iii): How frequently will the NAAQS SIP, including any associated air quality modeling, be evaluated and updated to confirm that it is representative of current air quality conditions?

Response 2(b)(iii): ADEQ envisions that it will periodically evaluate modeling and annual monitoring data to determine whether a revision to the SIP is necessary based on changes to the stringency of the NAAQS or when data analysis indicates potential for non-compliance with the NAAQS.

No revisions to the final rule are necessary due to this Comment.

2(b)(iv): In situations where the NAAQS SIP has not been updated to address revised or new NAAQS or is determined to be out-of-date, how will permitting actions be processed? Will delays in NAAQS SIP development result in permit reviews and issuances being held up or not processed? More explicitly, if the EPA revises a NAAQS and the standard is in effect, how will the ADEQ demonstrate that a permitting action will not interfere with attainment or maintenance of all current NAAQS if quantitative analyses, such as air dispersion modeling, are not allowed?

Response 2(b)(iv): Permits will be processed according to the current adopted Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation No. 19, as is the current accepted practice. When EPA revises a NAAQS, ADEQ initiates rulemaking to incorporate the revisions to the SIP portions of the regulations. Once approved by the APC&EC, ADEQ will develop a SIP based on those revisions and submit the SIP for EPA's approval. ADEQ will not delay permit reviews while SIP revisions are under development as the CAA gives states up to three years for implementation of revisions.

Under EPA SIP-approved Reg. 19.302, the Department takes precautions to prevent the NAAQS from being exceeded. The Department has an EPA-approved air monitoring network which quantifies concentrations of criteria pollutants in any areas that can be expected to be in excess of the NAAQS. The Department also periodically conducts computer modeling of criteria pollutants to evaluate the areas at risk of exceeding the NAAQS.

Also under EPA SIP-approved Reg. 19.405, the Department reviews Minor NSR permit applications to ensure, to the reasonable satisfaction of the Department, that any proposed stationary source that will be constructed or modified will operate without interfering with attainment of the NAAQS. Pursuant to Reg. 19.402, the Department will not grant a permit

unless the owner/operator demonstrates to the reasonable satisfaction of the Department that the stationary source will be constructed or modified to operate without interfering with the attainment or maintenance of the NAAQS.

No revisions to the final rule are necessary due to this Comment.

2(b)(v): How would the current restrictions regarding air dispersion modeling under Act 1302 interact with the proposed provisions that call for the Director to conduct air modeling? Is such a regulation even allowed pursuant to the restrictions imposed by Act 1302?

Response 2(b)(v): Act 1302 allows the Department to require pollutant-specific or facility-specific air dispersion modeling if such a requirement is included in a NAAQS SIP submitted to EPA (Ark. Code Ann. § 8-4-318(b)(3)(C)). The Department anticipates including when pollutant-specific or facility-specific air dispersion modeling will be required in a revised SIP submitted to EPA. The revised SIP will be made available for public comment prior to SIP submission.

See Response 1.

2(b)(vi): What approach would be used when a proposed permit action does not meet the requirement under Reg. 19.305(D)(1), but a qualitative analysis is not sufficient to ensure NAAQS compliance or protection? Would the Director be able to require and/or conduct air dispersion modeling to determine NAAQS compliance?

Response 2(b)(vi): See Response 1.

2(c): EPA states that Reg. 19.305(E) exempts De Minimis changes and changes to insignificant activities from the air quality analysis requirements. As discussed in the previous Comment 1, EPA requires ADEQ to provide additional information to demonstrate that these exempted permit actions with emission increases below the referenced thresholds will not cause or contribute to a violation of the NAAQS.

Response 2(c): See Response 2(a).

<u>Comment 3:</u> EPA states that ADEQ has proposed the addition of Minor NSR permitting thresholds and De Minimis thresholds for $PM_{2.5}$ at Reg. 19.401 and 19.407(C)(2)(iv), respectively. ADEQ needs to provide additional information regarding how these threshold values for $PM_{2.5}$ were determined. EPA states that 40 C.F.R. § 51.160(e) allows states to have discretion regarding the types and sizes of facilities subject to review, including obtaining a permit. However, EPA points out that the state must provide information supported by a

technical analysis or demonstration, which may include generic air quality modeling, ambient air data, and/or emissions inventory information to detail why specific sources are exempt from review. EPA requests that the additional information should outline how the ADEQ arrived at the threshold values and demonstrate that the exemption of proposed changes with emission increases less than the proposed thresholds will not interfere with attainment or maintenance of the PM_{2.5} NAAQS. This demonstration should take into consideration a source-by-source evaluation, as well as, provide that the cumulative impacts from all anticipated exempted sources will not cause or contribute to a violation of the NAAQS or interfere with NAAQS attainment or maintenance.

Response 3: The Department determined the PM_{2.5} thresholds based on the Significant Emission Rate (SER) for PM_{2.5} promulgated by EPA under 40 C.F.R. § 51.166(b)(23)(i). In EPA's "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM_{2.5})" rule finalized on May 16, 2008, EPA states that the agency considers "emissions increases [lower than the SERs] to be De Minimis. According to EPA's analysis of modeling using the ISC3 model described in 70 FR 66038, increases in direct PM_{2.5} emissions less than 10 tons per year would be unlikely to increase annual average ambient PM_{2.5} concentrations by more than four percent of the annual PM_{2.5} standard. Based on EPA's assertion that increases in PM_{2.5} below the SER promulgated under 40 C.F.R. § 51.166(b)(23)(i) can be considered De Minimis, the Department set the permitting thresholds at 10 tons per year.

The Department has contracted with ICF to produce a modeling-based analysis which will demonstrate that emission increases less than the proposed thresholds will not cause or contribute to a violation of the NAAQS or interfere with NAAQS attainment or maintenance. The Department anticipates submitting this analysis to EPA as part of a SIP revision to demonstrate that Arkansas Minor NSR program ensures that the construction or modification of any non-PSD stationary source does not interfere with the attainment of the NAAQS.

No revisions to the final rule are necessary due to this Comment.

Comment 4: EPA states that while the ADEQ is proposing only formatting changes to the Minor NSR permitting thresholds and De Minimis thresholds for all other pollutants at Reg. 19.401 and 19.407(C)(2) and is not revising the actual values, EPA would like to use this opportunity to point out that these thresholds are not currently SIP-approved. Arkansas previously submitted the current state-effective thresholds to the EPA for review and approval into the SIP on July 26, 2010. However, as outlined in EPA's letter to ADEQ, dated July 3, 2014, EPA needs additional information to aid in evaluation of those revised thresholds. To date, ADEQ has not provided additional information or a technical analysis or demonstration, such as an air quality modeling analysis or an evaluation of ambient air data and/or emissions inventory information to support the thresholds contained in the July 26, 2010 SIP revision. EPA

asks ADEQ to refer to their July 3, 2014 letter and the above comment regarding the type of additional information needed. EPA states that without the required additional information, the previously submitted Minor NSR permitting thresholds and De Minimis thresholds will not be approvable. If EPA is not able to approve the SIP submittal, any permits issued or exemptions from permitting claimed in accordance with these thresholds are not consistent with the current SIP-approved Minor NSR program and may require additional action for sources to be in compliance with the Arkansas SIP and to obtain federal authorization, including the amendments to existing permits or the issuance of permits to those sources claiming exemption under the state effective permitting thresholds.

Response 4: The Department acknowledges EPA's assertion that the current Minor NSR permitting thresholds and De Minimis thresholds have not yet been SIP-approved. On July 26, 2010, the Department submitted a SIP revision, including the current State-effective permitting thresholds, for review and approval by EPA. The values of the current permitting and De Minimis thresholds, with the exception of carbon monoxide, were set at the SERs promulgated under 40 C.F.R. § 51.166(b)(23)(i); therefore, ADEQ set the thresholds based on the SERs because EPA analysis has demonstrated that emission increases lower than these rates can be considered De Minimis. The permitting thresholds for carbon monoxide were set below the SER. Although sources that emit less than the current permitting thresholds are not required to obtain a permit, the Department still requires sources that emit greater than the previous permitting thresholds to register with the Department.

As part of the 2010 Threshold SIP revision submittal, the Department submitted emissions data for sources no longer required to obtain permits based on the threshold revisions which indicated that these sources made up 0.125 % or less of total permitted emissions for each criteria pollutant. The percentages of emissions from unregulated minor sources for each criteria pollutant in Arkansas were compared to those percentages included in the EPA's "Review of New Sources and Modifications in Indian Country" proposed rule (71 FR 48696). In the "Review of New Sources and Modifications in Indian Country," EPA included a table, which contained the percentage of total emissions from unregulated sources, and stated that the EPA "believes that [the table] provides excellent evidence that sources below the proposed Minor NSR thresholds will be inconsequential to attainment and maintenance of the NAAQS". The EPA did not include modeling to demonstrate that unregulated sources below EPA's minor NSR permitting thresholds in Indian Country would not cause a violation or interfere with the maintenance of the NAAQS. In Arkansas's 2010 Threshold SIP Revision submittal, the Department submitted data mirroring the table which EPA stated provided "excellent evidence" that proposed Minor NSR thresholds would be inconsequential to attainment and maintenance of the NAAQS and the data provided by Arkansas showed that the percent of total emissions from sources no longer required to obtain permits would be lower than what EPA found to be negligible for tribal minor NSR.

Although, the Department modeled its analysis of the change in Minor NSR permitting thresholds after the methodology that EPA considered reasonable in its "Review of New Sources and Modifications in Indian Country" rule, the EPA has requested additional documentation to support the revised Minor NSR permitting thresholds. Per EPA's request, the Department is working on additional technical analyses to demonstrate that the revision of previously submitted Minor NSR permitting and De Minimis thresholds have not caused a violation or interfered with the maintenance of the NAAOS.

No revisions to the final rule are necessary due to this Comment.

Comment 5: The Commenters state that ADEQ proposes to add a provision at Reg. 19.305(A) stating that, for modifications to existing sources which involve emissions increases of less than the pollutant-specific amounts established in Reg. 19.407(C), the resulting environmental impact is trivial and no further air quality analysis is required for each such pollutant. However, the Commenters point out that many of the provisions of Reg.19.407(C) do not reference emissions increases of pollutant-specific amounts. Thus, the Commenters suggest revisions to eliminate potential confusion and provide further consistency between the regulations and the proposed language for Reg. 19.305(A):

For construction of a new stationary source or modification [to] of an existing stationary source involving emissions increases, over permitted rates, of less than the pollutant-specific amounts established in [Reg.] 19.407(C)(2), the resulting environmental impact is trivial and no further air quality analysis is required for each such pollutant for the modification.

Response 5: See Response 1.

<u>Comment 6:</u> The Commenters state that ADEQ proposes to add a definition for "Emission increase" to Regulation No. 19, Chapter 2. However, the Commenters believe that the proposed definition for "Emission increase" should clarify that the definition in no way supersedes the Prevention of Significant Deterioration applicability determination calculation requirements found in Regulation No. 19, Chapter 9. The Commenters suggest that the proposed definition of "Emission increase" should be revised to state that emissions increases are calculated as described for those emission changes not subject to Chapter 9 of Regulation No. 19, consistent with the corresponding definition proposed in Regulation No. 26, Chapter 2.

The Commenters suggest the following revision to eliminate potential confusion among the regulated community and provide clarity to regulators and third parties, of the proposed definition of "Emission increase:"

"Emissions increase" means, the calculated sum for each federally regulated air pollutant, for emission changes not subject to Prevention of Significant Deterioration applicability under Chapter 9 of Regulation No. 19, the calculated sum for each air pollutant, based on the difference between the sum of the proposed permitted rates for all emissions units and the sum of the previously permitted emission rates for all emissions units.

Response 6: The Department agrees with the Commenter that the addition of the definition of "emission increase" to Chapter 2 could cause potential confusion among the regulated community. The proposed definition for "emission increase" was intended to address the use of "emission increase" in relation to De Minimis changes; however, the definition does not necessarily apply to other uses of the phrase "emission increase" elsewhere in the regulation. Therefore, the Department will remove the proposed definition from Chapter 2 and clarify in Reg 19.407(C)(2) that emission increases for each pollutant, for the purposes of determining whether a change will be considered De Minimis, are based on the differences between the sum of the proposed permitted rates for all emission units and the sum of the previously permitted emission rates for all units. No credit is allowed for emission units that have not actually operated or operated as permitted, emission reductions required by other rules or under an enforcement order, or old emission sources removed from service prior to initiation of this rulemaking on December 5, 2014.

Comment 7: The Commenters state that the proposed revisions to Reg. 19.305(D) provide that, for the construction of a new stationary source or the modification of an existing stationary source, the air quality analysis may be qualitative in nature where the need and specific criteria for air dispersion modeling has not been adopted on a pollutant-specific or facility-specific basis in the applicable NAAQS SIP. The Commenters suggest the following revisions to the proposed language of Reg. 19.305(D) to ensure the most comprehensive consideration of ambient air impacts when air dispersion modeling is not mandated by an applicable NAAQS SIP:

"For all other permits not described in 19.305(A) through 19.305(C) for the construction of a new stationary source or the modification of an existing stationary source, the air quality analysis may be qualitative in nature and may, except as set forth in (D)(1) and (D)(2) below, shall consider such factors as the nature, type, location, and emission parameters of the source, the existing attainment status of the area, the level of the proposed emissions increase relative to the area's permitted emission rates, the existing ambient air levels of the pollutant based on the state monitoring network, and historical monitored trends in ambient air levels of the federally regulated air pollutant."

Response 7: See Response 1.

Comment 8: The Commenters state that the approval criteria for minor new source air permits under Reg. 19.402 currently directs review of the application to the demonstration by the owner/operator that the stationary source will be constructed or modified to operate without resulting in a violation of applicable portions of Reg. 19 or without interfering with the attainment or maintenance of a NAAQS. The Commenters suggest aligning the minor new source approval criteria with the proposed provisions of Reg. 19.305, which requires the Department to consider potential ambient air quality impacts from a proposed increase in emissions for any pollutant for which a NAAQS is in effect, by revising Reg. 19.402 as follows:

"No permit shall be granted or modified under this chapter unless the owner/operator demonstrates review of the application to the reasonable satisfaction of the Department that the stationary source will be constructed or modified to operate without resulting in a violation of applicable portions of this regulation or without interfering with the attainment or maintenance of a national ambient air quality standard."

Response 8: See Response 1.

Comment 9: The Commenters point out that most of the proposed Reg. 19.305 complies with Ark. Code Ann. § 8-4-318. However, the Commenters believe that the proposed language on Reg. 19.305 (D) contains ambiguous language that may exceed the authority granted to ADEQ under § 8-4-318. The Commenters believe that the use of passive voice "[w]here the need has been demonstrated" fails to clarify that ADEQ bears the burden of demonstrating a need for air dispersion modeling in addition to the qualitative air quality analysis permitted by sub-section (D). The Commenters state that in light of the ambiguity in this proposed sub-section of Reg. 19.305, which renders this regulation inconsistent with ADEQ's regulatory authority pursuant to Arkansas law, they suggest revisions (in red) in the end of Reg. 19.305 (D) proposed language:

"For all other permits not described in 19.305(A) through 19.305(C) for the construction of a new stationary source or the modification of an existing stationary source, the air quality analysis may be qualitative in nature and may consider such factors as the nature, type, location, and emission parameters of the source, the existing attainment status of the area, the level of the proposed emissions increase relative to the area's permitted emission rates, the existing ambient air levels of the pollutant based on the state monitoring network, and historical monitored trends in ambient air levels of the federally regulated air pollutant. Said air quality analysis shall not include air dispersion modeling unless the Department has complied with air dispersion modeling based upon those factors listed in 19.305(D) above, together with Ark. Code Ann. § 8-4-318 (b)(3), and the Department demonstrates a need for air dispersion modeling based upon those factors listed in 19.305(D) above, together with other available and pertinent information such as the results of regional airshed modeling performed for NAAQS SIP development"

Response 9: See Response 1.

Comment 10: The Commenters believe that the proposed language in Reg. 19.305(D) fails to adequately account for the industrial and economic development of the State of Arkansas as required by Ark. Code Ann. § 8-4-312. The Commenters state that, if adopted, the proposed language in Reg. 19.305(D) may allow ADEQ to resurrect a "stringent" air dispersion modeling policy, and could have a significant deleterious effect upon the industrial and economic development of the State. The Commenters state that "Arkansas law requires ADEQ and the Commission to account for and consider this factor [industrial and economic development of the State of Arkansas] in the discharge of their respective responsibilities and duties as described at Ark. Code Ann. § 8-4-312(14). Also, the Commenters point to Ark. Code Ann. § 8-4-311(b)(1) which requires the Commission to consider the economic impact and the environmental benefit of the regulation on the people of the State and those entities that will be subject to the regulation. In the Commenter's opinion, neither the Commission nor ADEQ have given adequate consideration to the economic impact of this proposed regulation, insofar as the economic analysis conducted by ADEQ and the Commission has failed to consider the economic impact that the resurrection of an overly stringent air dispersion modeling requirement will have on the economic and industrial development of the State. The Commenters state that the Economic Impact/Environmental Benefit Analysis questionnaire prepared by ADEQ did not support the assertion that the proposed rules will have no economic impact. The Analysis states: "From a facility standpoint, there is no cost above what is required by the federal rule to implement the rule changes for which this statement is being prepared. There is no increase of permitting fees associated with this proposed change." The Commenters state that, although there may be no "increase of permitting fees associated with this proposed change," the requirement to conduct air dispersion modeling could significantly increase the costs that certain facilities must incur to obtain air permits. The Commenters believe that the results of those air dispersion models also may lead to more stringent requirements and control technology than required by federal regulations. The Commenters recommend that both the Commission and ADEQ undertake additional economic analysis and allow stakeholders sufficient time to review and comment on this additional analysis before the Commission adopts the proposed revisions. The Commenters state, "if ADEQ and the Commission fail to conduct more rigorous, supplemental economic analysis that accounts for the economic impact of the vague and ambiguous language contained in Regulation No. 19.305(D), and provide an additional opportunity for engaged stakeholders to review and comment upon the supplemental analysis or make changes to 19.305(D), they will fail to discharge their statutory duties pursuant Ark. Code Ann. §§ 8-4-311 and 8-4-312."

Response 10: ADEQ followed requirements found in Ark. Code Ann. § 8-4-312 during the development of the proposed regulation revisions, and Commission and Legislative approved forms were submitted to outline the economic impacts and environmental benefit analysis of proposed rulemakings. ADEQ asserts that the protocol, as found in the Arkansas Pollution

Control & Ecology Commission's ("APC&EC") *Guidelines*, was followed for the proposed NAAQS rulemaking and the EIS, FIS, and EI/EBA forms which ADEQ submitted were prepared following the examples found in the Appendices of APC&EC's *Guidelines*.

See Response 1.

Comment 11: The Commenters believe that the proposed language in Reg. 19.305 exceeds the authority granted to ADEQ by Ark. Code Ann. § 8-4-318. The Commenters state that collectively, Reg. 19.305 purports to identify the type of air quality analysis ADEQ will conduct as it considers "potential ambient air quality impacts from a proposed increase in emissions for any pollutant for which a NAAQS is in effect prior to issuing a permit for the construction of a new stationary source or the modification of an existing stationary source subject to" Regulation No.19. The Commenters believe that since Reg. 19 purports to define the type of air quality analysis ADEQ may require when making permitting decisions, ADEQ must comply with the requirements established in Ark. Code Ann. § 8-4-318, which state that "Unless otherwise voluntarily proposed and agreed to by the owner or operator of a stationary source, the Department shall not require or consider air dispersion modeling of an air contaminant for which a National Ambient Air Quality Standard has been established in air permitting decisions for stationary sources except:." The exception list includes: major source constructions; the Department's judgment with respect to permitting of a temporary source; and pollutant-specific or facility-specific air dispersion modeling explicitly required by an applicable NAAQS state implementation plan submitted to the EPA.

Response 11: See Response 1.

Comment 12: The Commenters state that ADEQ proposes to add a provision at Reg. 19.305(A) stating that, for modifications to existing sources involving emissions increases of less than the pollutant-specific amounts established in 19.407(C), the resulting environmental impact is trivial and no further air quality analysis is required for each such pollutant. Therefore, the Commenters suggest the Commission should codify the De Minimis permitting thresholds currently found in Reg. 19.407(C)(2) (including the proposed thresholds for PM_{2.5} emissions) directly into the provisions of Reg. 19.305(A). The Commenters believe that this proposed change would eliminate potential confusion and reduce uncertainty among the regulated community in light of the uncertainty on EPA-status approval of Reg. 19.407(C), which is part of the Arkansas State Implementation Plan (SIP). As an alternative, the Commenters suggest, should the Commission codify the De Minimis permitting thresholds directly into the provisions of Reg. 19.305(A), to revise proposed Reg. 19.305(A) to specifically reference the "pollutant specific amounts established in 19.407(C)(2)."

Response 12: See Response 1.

Comment 13: The Commenters request Arkansas to exempt Dimethyl Carbonate and 2-Amino-2-methyl-1-propanol (AMP) as a Volatile Organic Compound (VOC). The Commenters state that "the coatings industry is under constant pressure to reformulate products to lower and lower VOC content. As a result, there is a critical and urgent need for safe, effective and affordable exempt solvents and coating formulators need all available tools to formulate both lower VOC and reactivity coatings. DMC and AMP could prove useful for coatings formulations." Therefore, the Commenters believe that this exemption "may be an incentive for industry to use these negligibly reactive compounds in place of more highly reactive compounds that are regulated as VOCs." The Commenters request exempting DMC and AMP as VOC's. In addition, the Commenters suggest that Arkansas include a direct reference to EPA's Exempt VOC Compound List at 40 C.F.R. Section 51.100(s)(1) to minimize the need to conduct a formal rulemaking every time EPA exempts a VOC compound.

Response 13: ADEQ has included the exemption of both Dimethyl Carbonate and 2-Amino-2-methyl-1-propanol (AMP) as "Volatile Organic Compounds" (VOC) in Chapter 2 of this proposed rulemaking. ADEQ is not able to include direct reference to EPA's Exempt VOC Compound List at 40 C.F.R. § 51.100(s)(1). In order to include federal requirements in APC&EC air regulations, the Department must follow protocol and initiate a new rulemaking to incorporate EPA's final rules.

No revisions to the final rule are necessary due to this Comment.

Comment 14: The Commenters stated that these proposed regulations may create financial burdens on public utilities in the state of Arkansas, consequently affecting Arkansas rate payers. The Commenters noted that the accelerated timeframe under which these regulations are being considered is fairly problematic and affected stakeholders need some time to consider the impacts of these regulations. The Commenters pointed out, particularly on Regulation No. 19, that the potential changes to existing regulations include very complex matters. The Commenters stated, "As you know the Department is required to consider numerous factors before approving these changes to these regulations." The Commenters also noted that "it is extremely difficult for the stakeholders to generate substantive comments regarding these complex amendments to these regulations in the timeframe that has been allotted by the Department."

Response 14: ADEQ asserts that this rulemaking process has not been accelerated and has followed state and federal requirements related to public comment period. ADEQ adhered to requirements of Reg. No. 8.812 and protocol, as found in the APC&EC *Regulation Formatting and Drafting Guidelines*, was followed for the proposed NAAQS rulemaking. This included the

preparation and submission of the Economic Impact Statement (EIS), Financial Impact Statement (FIS), and Environmental Impact and Economic Benefit Analysis (EI/EBA) forms.

ADEQ does not agree that this rulemaking contains complex amendments, but rather revised federal requirements. ADEQ also asserts that the allotted time for public comment period was given as prescribed by Reg. No. 8.805 and 8.806, "Administrative Procedures." APC&EC and ADEQ both acknowledge that the U. S. Congress, EPA, and the state intend (more so, require) that a public comment process, including public hearing and public comment, occurs for all proposed rulemakings, and that public input is encouraged. As such, APC&EC extended the public comment period for this proposed rulemaking as requested by the public. Under the CAA guidelines, once the SIP is prepared, ADEQ will schedule another public notice and comment period, and revisions will be considered based on public input prior to submitting a complete SIP package to EPA for review. All comments received through public hearings and comment periods (and the resulting responses from ADEQ) are included as part of the SIP package that is reviewed by EPA. Therefore, this rulemaking and the SIP process will provide stakeholders with extensive opportunity to provide their comments.

No revisions to the final rule are necessary due to this Comment.

<u>Comment 15:</u> The Commenters express concern regarding ambiguity between Regs. No. 19 and 26, with regard to the extent to which they would authorize the Department to require permittees, including coal-fired power plants and facilities in the State, to undertake air modeling on their own. According to the Commenters, language in Regulation No. 19 is ambiguous with regard to the ability of the Department and its Director to require modeling under certain circumstances. Therefore, the Commenters suggest changes to the amended regulation.

Response 15: ADEQ has the authority to require air dispersion modelling for PSD, temporary sources, or those sources or pollutants specifically addressed in a NAAQS SIP submitted to EPA (Ark. Code Ann. 8-4-318). The Department may also conduct and consider air dispersion modeling for those non-PSD stationary sources that voluntarily propose and agree to modeling. ADEQ can also use dispersion modeling as a tool for the development of state implementation plans and general permits.

The Department is in the process of determining what pollutant-specific or facility-specific NAAQS evaluation requirements will be required for non-PSD permitting actions. The Department anticipates that these NAAQS evaluation requirements will be included in the subsequent NAAQS SIP that the State will submit to EPA.

See response 1.

No revisions to the final rule are necessary due to this Comment.

Comment 16: The Commenters believe that there is some disagreement among stakeholders over the effect of the proposed amendments and the authority that would be granted to the Department. The Commenters are unclear as to the intent of the proposed changes and believe that it is fairly problematic that the proposed changes are not clear to the people that are going to be affected by them. In addition, the Commenters state, "we are being asked to opine on the proposed changes and even provide economic analysis in regard to the proposed changes in such a short time frame that is almost impossible for this Department to discharge its duty to consider all of the facts and information pursuant to Arkansas Law for approving these changes in these proposed regulations."

Response 16: The proposed language is congruent with current Arkansas statutes and the CAA, and clarifies the authority given to the Department to comply with both State and federal requirements.

The Department has provided opportunities for stakeholders' feedback through the public comment period which was extended by public request. In addition, the Department has also organized a series of stakeholder meetings that have been taking place concomitantly with these rulemakings to seek their suggestions and feedback for the revisions of the State's infrastructure SIP and NAAQS SIP that will be completed after these rulemakings are adopted.

Additionally, the SIP proposal will provide stakeholders with additional opportunity to comment on the SIP. All comments received through public hearings and comment periods (and the resulting responses from ADEQ), are included as part of the SIP package that is reviewed by EPA.

No revisions to the final rule are necessary due to this Comment.

Comment 17: The Commenters appreciate the opportunity to provide comments to the proposed revisions to the APC&EC Regulations No. 18, 19, and 26, proposed by ADEQ. The Commenters state that they have strong interests in the proposed revisions to the Regulations and the implementation of the NAAQS proposed for adoption as part of these rulemakings. The Commenters point out that these rulemakings affect the regulated community that own or operate sources that emit one or more of the pollutants and will be subjected to the new NAAQS should the Commission adopt the proposed revisions. Therefore, the Commenters state that they generally support the incorporation of the new standards into the State air pollution control regulations, and recognize that the Commission has an obligation to do so in the normal course of federal-state regulatory affairs to avoid imposition of a Federal Implementation Plan. However, the Commenters also state, "the Commission and ADEQ have an obligation under the

CAA and the Arkansas Water & Air Pollution Control Act to develop a comprehensive State Implementation Plan ("SIP") for attainment and maintenance of the NAAQS. [40 C.F.R. § 51.161 and Ark. Code Ann. § 8-4-318]."

Response 17: The Department acknowledges and appreciates this Comment and asserts that these rulemakings are necessary to include the revised PM_{2.5}, O₃, Pb, NO₂, and SO₂ NAAQS into APC&EC regulations. The Department is in the process of developing a SIP revision, concomitantly with these proposed rulemakings, to ensure attainment and maintenance of the revised NAAQS. The SIP revisions will be made available for public comment prior to its submission to EPA.

No revisions to the final rule are necessary due to this Comment.

Comment 18: The Commenters state, "CAA requires that SIPs provide a pre-construction review process for new sources and modifications of existing sources that includes legally-enforceable procedures including the basis for determining the types and sizes of construction or modifications which will be subject to review, an application process disclosing the nature and amounts of emissions to be emitted, the permit approval and public-participation process, and the air quality data that will be used to facilitate such review [51.160]." The Commenters also state, "to 'implement' the NAAQS, the state must follow the process set forth in the CAA for SIP development, a process which requires the state to look at a variety of tools (from economic incentives to emissions standards) that can be applied to a range of sources (large and small, mobile and stationary), to meet the NAAQS."

The Commenters state that EPA has emphasized that states should consider a wide range of options and their potential benefits while developing their SIPs. The Commenters understand that the SIP-development process is not intended to focus solely on large stationary sources, as those sources are already covered by other federal regulations, such as the New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, and Prevention of Significant Deterioration/Nonattainment New Source Review programs. Instead, the Commenters state, "relevant 'control strategies' apply to all types of sources, stationary and mobile, and include, but are not limited to:

- Economic incentive or disincentive programs;
- Scheduling, relocation, and closure programs;
- Mobile source inspection and maintenance programs;
- Fuel or fuel additive programs for mobile sources; and
- Emissions limitations on stationary sources."

The Commenters state, "EPA further stipulates that nothing in its regulations should be construed, among other things, '[t]o encourage a State to adopt any particular control strategy without taking into consideration the cost-effectiveness of such control strategy in relation to that of alternative control strategies,' '[t]o encourage a State to prepare, adopt or submit a plan without taking into consideration the social and economic impact of the control strategy set forth in such plan,' or '[t]o encourage a State to adopt a control strategy uniformly applicable throughout a region unless there is no satisfactory alternative way of providing for attainment and maintenance of a national standard throughout such region.'"

The Commenters believe these federal factors are echoed by some of those found at the Arkansas legislature, which requires the Commission to consider when exercising its powers and responsibilities as found at Ark. Code Ann. § 8-4-312(12) "[i]nterference with reasonable enjoyment of life by persons in the area and conduct of established enterprises that can reasonably be expected from air contaminants," a factor it can only truly explore through the SIP development process. The Commenters believe the information provided in the SIP development steps will inform the Commission whether emissions are interfering with business and human health and will help ADEQ to determine what steps to propose to maintain (or, where needed, to achieve) compliance with the revised NAAQS.

Response 18: The Department acknowledges and appreciates this Comment.

No revisions to the final rule are necessary due to this Comment.

<u>Comment 19:</u> The Commenters state that the use of the terms "State Implementation Plan" and "Plan" should be consistent across regulations. The Commenters point out that existing regulations include a definition of "Plan" in Chapter 2 of Regulation No. 19, which states that the term means the Arkansas Plan of Implementation for Air Pollution Control. However, the Commenters further point out, there are instances across Regulations No. 18, 19, and 26 where the terms "Plan," "State Implementation Plan," and "Regulation 19" appear to be used interchangeably (see, e.g., introduction paragraph to Chapter 2 of Regulation No. 26). The Commenters suggest that the Commission review the use of those terms throughout Regulations No. 18, 19, and 26 for consistency and to ensure that those terms are appropriately incorporated.

Response 19: The Department has reviewed the use of the terms "State Implementation Plan," "Plan," and "Regulation 19" in Regulations No. 18, 19, and 26. The terms in Regulation No. 19, as well as in Regulation No. 18, are not used interchangeably but applied throughout the regulations according to the description in the Definitions chapter. The Department agrees with the Commenters' suggestion for clarification of these terms in Regulation No. 26 and will consider including clarifying revisions in a future rulemaking so that such revisions may be open to public comment.

No revisions to the final rule are necessary due to this Comment.

<u>Comment 20:</u> The Commenters support the adoption of the NAAQS into Arkansas air rules and recognize proposing a common-sense approach to maintaining Arkansas's clean air. In addition, the Commenters support ADEQ's proposed changes to current state regulations, which will allow flexibility in the permitting process and would give business owners the choice to make cost-effective reductions in emissions from current operations in order to more quickly obtain new permit modifications for those changes.

Response 20: The Department acknowledges and appreciates this Comment.

No revisions to the final rule are necessary due to this Comment.

<u>Comment 21:</u> The Commenters are aware and respect that ADEQ has the challenge to maintain ever more stringent air quality standards imposed by the EPA. In addition, the Commenters state that this is especially true considering that ADEQ's authority over only stationary sources limits the Department's ability to control major contributing sources such as fires and traffic. Despite this limitation, the Commenters believe that ADEQ has created a valuable long-term tool to promote the growth of jobs in Arkansas through its modified permitting process and support the proposed modifications to the regulations.

Response 21: The Department acknowledges and appreciates this Comment.

No revisions to the final rule are necessary due to this Comment.

<u>Comment 22:</u> The Commenters recognize that implementation details, policies, and procedures will be defined in the State Implementation Plans currently under development and encourage ADEQ to continue to use a public process in the development of those implementation details.

Response 22: The Department acknowledges and appreciates this Comment.

No revisions to the final rule are necessary due to this Comment.

<u>Comment 23:</u> The Commenters state that they have an ongoing interest in the adoption and implementation of the NAAQS in accordance with the requirements of State and federal law and regulations and sound scientific and engineering practices. The Commenters understand that updating the State's regulations to refer to the national standards is required in the normal course of federal-state regulatory affairs. However, the Commenters state that the revised NAAQS are very stringent by historical standards and believe that due to the complexity of sources that

contribute to ambient concentrations of the pollutants in question, it is critical that the State develop a comprehensive plan for implementation of the standards in question, consistent with the requirements of Arkansas statute and the CAA.

Response 23: The Department acknowledges and appreciates this Comment. ADEQ has carefully considered all the elements to comply with State and federal requirements and is diligently seeking stakeholders' participation for a transparent and effective process to develop an approvable SIP.

No revisions to the final rule are necessary due to this Comment.

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Arkansas Department of Environmental Quality

By: _____

Stuart Spencer, Associate Director, Office of Air Quality