UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
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FEB 17 2015

Mr. Doug Szenher
Public Outreach and Assistance (POA) Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

RE: EPA Comments on Proposed Revisions to the Arkansas Plan of Implementation for Air Pollution Control – Regulation No. 19 (Docket No. 14-010-R)

Dear Mr. Szenher:

Thank you for the opportunity to review and provide comments on the substantive revisions to the Arkansas Plan of Implementation for Air Pollution Control, contained in Regulation No. 19. We understand that the Arkansas Department of Environmental Quality (ADEQ) has proposed these revisions to include the revised 2012 $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) and to make other updates to Regulation No. 19 consistent with recent revisions to federal rules. The revisions also include the addition of a new section that outlines source obligations and restrictions for air quality analyses completed in support of permit actions.

The EPA is concerned that the proposed revisions may not be fully supported and/or consistent with applicable federal requirements and those requirements contained in the current Arkansas State Implementation Plan (SIP). As discussed in our enclosed comments, based on the information available in the proposed revisions to Regulation No. 19 we could not approve these changes into the SIP, specifically because of the unsupported Minor New Source Review (NSR) permitting thresholds, the *De Minimis* thresholds for $PM_{2.5}$, and the restrictive nature of the tiered air quality analysis requirements that are not consistent with federal requirements for Minor NSR programs.

We look forward to working with you as you address our concerns. Please note that our comments today do not constitute final determinations concerning the approvability of the revisions to the Arkansas Plan of Implementation for Air Pollution Control or the SIP. If you

have any questions about the EPA's review of your proposed rulemaking, please feel free to contact Ms. Ashley Mohr of my staff at (214) 665-7289.

Sincerely,

Mark Hansen
Acting Associate Director for
Air Programs

Enclosure

cc: Tammy Harrelson, Arkansas Department of Environmental Quality
Stuart Spencer, Arkansas Department of Environmental Quality

Enclosure

1. The ADEQ has proposed the addition of Reg. 19.305, which outlines the air quality analysis requirements associated with air permits issued under Regulation No. 19. The provisions establish tiered air quality analysis requirements based on the type of permit action being taken. It is our understanding that the air quality analyses required by Reg. 19.305 are intended to meet the SIP-approved Reg. 19.405 requirement that the ADEQ's 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." While we agree with the basic elements of the proposed approach that allows for both qualitative or quantitative analyses, depending on the project-specific conditions, we have 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 NSR Program will not cause or contribute to a NAAQS violation or interfere with the maintenance of the NAAQS. 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. These analyses may be conducted by the permit applicant or the permitting authority as needed. Reg. 19.305, as proposed by the ADEQ, includes a tiered approach that restricts qualitative and quantitative analyses to specific cases and does not allow the ADEQ to require or rely upon these analyses for all Minor NSR permitting actions. Because the tiered approach does not allow for case-by-case NAAQS demonstrations, the 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. The 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, the proposed tiered air quality analysis approach must address the intervals upon which the 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. Will the ADEQ update the rules or modeling and technical analyses that the rules rely upon if the EPA releases new NAAQS standards or does the 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.

2. In addition to our general concerns about Reg. 19.305 discussed above, we also have several specific questions listed below 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. Please provide answers to these questions and any referenced supporting information,

since it will be necessary for us determine if the proposed tiered air quality analysis requirements are consistent with applicable requirements. Based on our 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.

(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 we agree 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. 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, the 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, we would like to point out 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.

(b) 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.

We agree 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, as proposed, Reg. 19.305(D) appears to be very restrictive regarding when a quantitative air dispersion modeling may be required or conducted by the Director. We have 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. Please 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.

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.
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?
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?
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 NAAQS attainment or maintenance of all current NAAQS if quantitative analyses, such as air dispersion modeling, is not allowed?
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?
vi. What approach would be used when a proposed permit action does not meet the requirement under Reg. 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?

(c) Reg. 19.305(E) exempts *De Minimis* changes and changes to insignificant activities from the air quality analysis requirements. As discussed in Comment 2(a) above, the ADEQ needs 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.

3. The 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. The ADEQ needs to provide additional information regarding how these threshold values for $PM_{2.5}$ were determined. 40 CFR §51.160(e) allows states to have discretion regarding the types and sizes of facilities subject to review, including obtaining a permit. However, 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. The additional information should outline how the ADEQ arrived at the thresholds 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.

4. 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 not revising the actual values, we 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 our July 3, 2014 request for information, we need additional information to aid in our evaluation of those revised thresholds. To date, the 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. Please refer to our July 3, 2014 letter and Comment 3 above regarding the type of additional information needed. Without this additional information, the previously submitted Minor NSR permitting thresholds and *De Minimis* thresholds will not be approvable. If we are 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.