



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Cheryl Newton
Director, Air and Radiation Division
U.S. Environmental Protection Agency (U.S. EPA)
Region V
77 West Jackson Boulevard, AR-18J
Chicago, IL 60604-3950

Dear Ms. Newton:

Staff of U.S. EPA Region 5 and the Indiana Department of Environmental Management (IDEM) coordinated a call with U.S. EPA's Office of Air Quality Planning and Standards (OAQPS) on May 19, 2011 to discuss the questions that Indiana posed within its March 23, 2011 letter to you concerning New Source Review (NSR) for fine particles. At the conclusion of the call, U.S. EPA staff could not commit to providing written responses to the items discussed during the call. As a result, this letter is to outline Indiana's understanding of U.S. EPA's responses, and the current status of rulemaking for Indiana concerning this matter. The following summarizes the original questions and the outcome of the May 19th discussion:

- 1) Can offset ratios be seasonal or only annual?

Due to the fact that the standard is annual, offset ratios would need to be annual as well, with the same ratio applying year round.

- 2) Can offset ratios vary among portions of the state, or must one ratio apply to the entire state?

If the state makes a sound technical demonstration to support the ratios it devises, the ratios can vary among geographic regions within the state. The boundaries of the regions do need to be clearly defined.

- 3) If data supports it, can precursor pollutants addressed in Indiana's rule vary among portions of the state?

Not for sulfates. The state must conduct an analysis to determine if nitrates should be treated as a regulated precursor for portions or all of the state.



- 4) How consistent must the ratios and precursor pollutants Indiana selects be in comparison to neighboring States?

EPA is not concerned about inconsistency among state submittals. Indiana simply must ensure that its submittal adequately addresses the minimum requirements and consists of technically sound justification.

- 5) Can Indiana's demonstration rely on speciated ambient monitoring data or must it rely solely on dispersion modeling?

Monitoring data can be used to supplement an evaluation, as can dispersion modeling output. However, EPA views photochemical modeling to serve as the core to the technical demonstration.

- 6) If speciated ambient monitoring data is used to support a demonstration, how would U.S. EPA expect Indiana to treat the precursor pollutants that account for a more significant portion of the mass than sulfur dioxide and nitrogen oxides?

EPA's review will be limited to the precursor pollutants identified within the federal rule. Contributing pollutants like organic carbon, ammonia, and elemental carbon are assumed to be excluded unless the state opts to regulate them as a precursor.

- 7) If modeling is required, what model is acceptable since secondary formation of precursor pollutants is essential to such a demonstration?

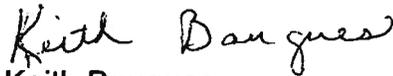
EPA views the use of a photochemical model like CMAQ or CAMx to be necessary to properly evaluate and provide the technical support for offset ratios.

Upon receipt of these oral responses to the questions as originally outlined via the IDEM letter dated March 23, 2011, and following consultation with U.S. EPA Region 5 staff, U.S. EPA OAQPS staff and the Lake Michigan Air Directors Consortium (LADCO), it has become clear that IDEM must receive written guidance concerning photochemical modeling procedures in order to properly evaluate and provide the necessary technical support to establish offset ratios within the state rule and a State Implementation Plan (SIP). Furthermore, it has been brought to our attention that U.S. EPA is, in fact, working on such guidance and sorting through a series of complex issues associated with this matter in coordination with a workgroup affiliated with the National Association of Clean Air Agencies (NACAA). This guidance is scheduled to be complete in December 2011.

In the absence of documented and detailed modeling guidance, it is impossible for states to prepare a rule-supported SIP that meets a series of criteria that are yet to be defined. Therefore, Indiana is unable to proceed with its rulemaking and SIP submittal to address NSR for fine particles until it receives the necessary guidance from U.S. EPA to conduct the necessary photochemical modeling and supplemental technical analysis to ensure SIP approval. Upon receipt of this written guidance, Indiana commits to provide U.S. EPA with a SIP within one year, as originally discussed in the March 23rd communication.

Please feel free to contact me at (317) 232-8222 or kbaugues@idem.in.gov should you have any further questions.

Sincerely,



Keith Baugues
Assistant Commissioner

KB/sad

cc: John Mooney, U.S. EPA Region V
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