



**Walter Wright, Jr.**  
wwright@mwlaw.com  
(501) 688.8839

## Arkansas' 1-hr SO<sub>2</sub> Saga!!: Stuart Spencer (Arkansas Department of Environmental Quality) Association of Air Pollution Control Agencies 2017 Fall Business Meeting Presentation

10/24/2017

Arkansas Department of Environmental Quality ("ADEQ") Associate Director, Office of Air Quality, Stuart Spencer, undertook a presentation at the 2017 Fall Business Meeting of the Association of Air Pollution Control Agencies ("AAPCA") titled:

*Arkansas' 1-hr SO<sub>2</sub> Saga!! ("Presentation")*

Mr. Spencer serves as President of AAPCA.

The *Presentation* addressed issues Arkansas has encountered since the United States Environmental Protection Agency's ("EPA") establishment of the Clean Air Act National Ambient Air Quality Standard ("NAAQS") for 1-hr SO<sub>2</sub> at 75 parts per billion.

Sulfur Dioxide (SO<sub>2</sub>) occurs in the atmosphere with a variety of particles and other gases. It undergoes chemical and physical reactions with such gases. Sulfates and other transformation products can be formed. It is also a rapidly diffusing reactive gas that is soluble in water.

SO<sub>2</sub> is one of a limited number of air pollutants that have been designated criteria air pollutants and subject to NAAQS. Section 108 of the Clean Air Act requires that EPA identify air pollutants ("which may reasonably be anticipated to endanger public health and welfare") and to issue air quality criteria for them.

Section 109 subsequently requires that EPA promulgate primary and secondary NAAQS for the pollutants identified under Section 108. Section 109(d)(1) mandates periodic review and, if appropriate, revision of existing air quality criteria and NAAQS.

The states are primarily responsible for ensuring attainment and maintenance of the NAAQS once EPA has established or revised them. Each state is therefore required to formulate, subject to EPA approval, a state implementation plan ("SIP") designed to achieve each NAAQS. The SIPs will contain the measures and actions the state proposes to undertake to attain each NAAQS. States also have the responsibility to identify areas not in attainment for a particular criteria air pollutant.

Mr. Spencer initially described EPA's designation in July 2013 of areas in 16 states as nonattainment for the SO<sub>2</sub> NAAQS based on certain prior monitoring data, noting no areas were designated in Arkansas. He

notes a subsequent lawsuit by the Sierra Club alleging that EPA had failed to perform a nondiscretionary Clean Air Act duty by not designating all portions of the United States by the June 2013 deadline. An EPA/Sierra Club consent decree which provided three deadlines (“Rounds”) for completing area designations is also discussed.

The *Presentation* further described:

- EPA SO2 Data Requirements Rule
- Alternative of Air Quality Modeling Protocol

As to Arkansas, the *Presentation* noted in part:

- Round 2 Arkansas facilities:
  - Entergy Arkansas’ White Bluff Steam Electric Station
  - Entergy Arkansas’ Independence Steam Electric Station
- Round 3 Arkansas facilities:
  - FutureFuel Chemical Company
  - Southwest Electric Power Company’s Flint Creek Power Plant
  - Plum Point Services Company’s Plum Point Energy Station
- 2015 Arkansas submission of modeling to EPA for a Round 2 source, indicating passing results
- Sierra Club EPA submission
- EPA’s provision of Sierra Club modeling to Arkansas
- Timing as to Arkansas’ ability to evaluate/response to Sierra Club Modeling
- Arkansas perspective on Sierra Club modeling
- Arkansas culpability analysis
- Arkansas’ perspective on EPA’s designation of a county as “unclassifiable” and requirement to provide additional information
- Arkansas’ request to EPA to use two beta options in view of the relevant unusual terrain
- Arkansas’ provision of additional information and lack of EPA response
- Arkansas’ submission of follow-up modeling results (January 2017)
- EPA’s modification of model algorithm and requirement for Arkansas’ resubmission
- Arkansas’ use of prognostic meteorological data in view of updated model
- Arkansas’ view of absence of EPA response
- Arkansas’ investment to date on the process
- \$120,000 to provide accurate modeling to refute third-party modeling
- Criticisms of third-party modeling
- Lack of resolution of the issue

[A copy of Mr. Spencer’s slides can be downloaded here.](#)