# TCEQ LogoNational Comments

# Executive Review Summary

**TCEQ Proposed Comments On:**

On February 22, 2017, the United States Environmental Protection Agency (EPA) published a notice in the Federal Register (82 FR 11356) that the draft *Review of the Primary National Ambient Air Quality Standards for Sulfur Oxides: Risk and Exposure Assessment Planning Document* (REA Planning Document) is available for public review and comment.

**Overview of Proposal:**

The REA Planning Document presents the EPA’s proposed approach for conducting quantitative analyses of sulfur dioxide (SO2) exposures and health risks as part of its current review of the National Ambient Air Quality Standard (NAAQS). The final SO2 REA, anticipated to be released in Spring 2018, will inform decisions made in the subsequent Policy Assessment and Proposed Rule. Under a proposed consent decree (82 FR 4866), the EPA will issue its Proposed Rule no later than May 25, 2018, and will finalize the review of the primary SO2 NAAQS no later than January 28, 2019. The EPA last revised the primary SO2 NAAQS based on the available scientific literature supporting that standard in 2010.

**Summary of Comments:**

The SO2 REA Planning Document outlines various new analytical approaches that will be conducted in the forthcoming REA. The TCEQ encourages the EPA to consider the following points in this planning phase and in the drafting of the REA.

Generally, the EPA should approach the upcoming analysis with the goal of having a stable and robust standard with clearly articulated risk estimates. As in the last SO2 NAAQS review, the EPA should continue to consider the stability and robustness of the duration of the SO2 standard and maintain the 1-hour duration. Further, the EPA should include uncertainty bounds in its presentation of risk assessment results to allow for more accurate and meaningful communication of risk.

The EPA should also clarify several issues with the SO2 exposure-response (E-R) curve. Specifically, the EPA should more clearly articulate the shape of the E-R curve for SO2-mediated decrements in specific airway resistance (sRaw). The evidence suggests a threshold of effects at least 200 ppb, so the EPA should accurately portray the uncertainties of risk attributed to SO2 exposures at concentrations less than 200 ppb and provide a clearer justification for the use of benchmarks below 200 ppb in its analysis. The EPA should also reconsider using logit and probit E-R functions that estimate risk of SO2 exposure at 0 ppb SO2 concentrations.

The EPA should provide additional information on its modeling for the SO2 REA. Modeling data should be verified against monitored data (5-minute ambient concentrations) or experimental data (microenvironment data) to improve confidence in the model. The results of these comparisons should be presented in the REA. The EPA should also finalize which analyses will be included in the REA in the REA Planning Document. While the air pollution exposure (APEX) model is being updated, the TCEQ encourages the EPA to develop a graphic user interface for the program.

Finally, the EPA should more fully discuss its rationale for its determination of the level at which changes in sRaw become adverse; its position that the selected model cities are sufficiently representative; and how it will, in the absence of a quantitative uncertainty analysis, use a balanced, science-grounded approach to its qualitative uncertainty evaluation. In all instances, the TCEQ encourages the EPA to present important uncertainties together with risk estimates.

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**Deadline**: April 13, 2017