



Division of Environment
Bureau of Air

REGULATORY IMPACT STATEMENT CONSISTING OF:

- I. **ENVIRONMENTAL BENEFIT STATEMENT**
- AND
- II. **ECONOMIC IMPACT STATEMENT**

Pursuant to K.S.A. 77-416

**PROPOSED AMENDMENT OF EXISTING AIR QUALITY REGULATION:
K.A.R. 28-19-300**

March 2016

This page intentionally left blank.

Background of Proposed Amendments

The Kansas Air Quality Act, K.S.A. 65-3001 *et seq.*, authorizes the secretary of the Kansas Department of Health and Environment (KDHE) to develop rules and regulations to conserve air quality and to control air pollution in the state of Kansas. In large part, the Kansas air quality regulatory program implements the requirements of the federal Clean Air Act, 42 U.S.C. § 7401 *et seq.*, as a state program pursuant to the Kansas State Implementation Plan (SIP) approved by the United States Environmental Protection Agency (USEPA). Upon adoption of the proposed amendments, KDHE will submit a revised SIP to the USEPA for approval.

Specifically, K.A.R. 28-19-300 implements the Minor New Source Review (Minor NSR) program that the USEPA promulgated at 40 CFR §51.160 – 51.164 in response to requirements of the federal Clean Air Act, 42 U.S.C. §7401 *et seq.* The Minor NSR permitting program addresses pollutants from stationary sources that do not require Prevention of Significant Deterioration (PSD) or nonattainment NSR permits. The purpose of Minor NSR permits is to prevent the construction of new sources or modifications at existing sources that would interfere with attainment or maintenance of a National Ambient Air Quality Standard (NAAQS) or violate the control strategy in nonattainment areas. Also, Minor NSR permits often contain permit conditions to limit the sources emissions to avoid PSD or nonattainment NSR.

KDHE is proposing to amend K.A.R. 28-19-300 “*Construction permits and approvals; applicability*” specifically to implement the revised NAAQS for Fine Particulate Matter (PM_{2.5}). In addition, to clarify and refine applicability criteria for sources subject to the Kansas Minor NSR permitting program, KDHE is proposing the following amendments to:

- eliminate the requirement for all Title IV Acid Rain sources to obtain construction permits regardless of emissions;
- clarify the preconstruction review requirements for sources emitting hazardous air pollutants, or sources subject to standards promulgated by the USEPA; and
- add prescriptive language to eliminate the requirement for sources to obtain an approval solely due to being subject to standards promulgated by the USEPA without regard to emissions for insignificant activities.

This Regulatory Impact Statement, consisting of an Environmental Benefit Statement and Economic Impact Statement, is submitted in support of the proposed amendments.

I. Environmental Benefit Statement

1) Need for proposed amendments and environmental benefit likely to accrue.

a) Need

These amendments to K.A.R. 28-19-300 are needed to codify the regulatory language to align with the federal requirements and current state Minor NSR permitting practice. The proposed amendments are needed specifically to implement the revised NAAQS for Fine Particulate Matter (PM_{2.5}), eliminate the requirement for all Acid Rain sources to obtain a construction permit regardless of emissions, and to clarify the preconstruction review requirements for sources emitting hazardous air pollutants, or sources subject to other standards promulgated by the USEPA.

b) Environmental benefit

The proposed amendments to K.A.R. 28-19-300 clarify and refine applicability criteria for sources subject to the Minor NSR permitting program. The amendments do not impose any additional reductions in pollutants to sources but add PM_{2.5} to the analyses conducted as part of the permitting application and review process. No direct environmental benefits are anticipated to accrue due to the proposed changes.

2) When applicable, a summary of the research indicating the level of risk to the public health or the environment being removed or controlled by the proposed rules and regulations or amendment.

The health effects associated with exposure to PM_{2.5} are significant. Epidemiological studies have shown a significant correlation between elevated PM_{2.5} levels and premature mortality. Other important effects associated with PM_{2.5} exposure include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems. Individuals particularly sensitive to PM_{2.5} exposure include older adults, people with heart and lung disease, and children.

On July 18, 1997, the USEPA revised the NAAQS for particulate matter (PM) to add new standards for fine particles, using PM_{2.5} as the indicator. The USEPA established health-based (primary) annual and 24-hour standards for PM_{2.5} [62 FR 38652]. The USEPA set an annual standard at a level of 15 micrograms per cubic

meter ($\mu\text{g}/\text{m}^3$) and a 24-hour standard at a level of $65 \mu\text{g}/\text{m}^3$. The USEPA also established welfare-based (secondary) standards identical to the primary standards. The secondary standards are designed to protect against major environmental effects of $\text{PM}_{2.5}$ such as visibility impairment, soiling, and materials damage.

On October 17, 2006, the USEPA revised the primary and secondary NAAQS for $\text{PM}_{2.5}$ and PM_{10} . In that rulemaking, the USEPA reduced the 24-hour NAAQS for $\text{PM}_{2.5}$ to $35 \mu\text{g}/\text{m}^3$ and retained the existing annual $\text{PM}_{2.5}$ NAAQS of $15 \mu\text{g}/\text{m}^3$. In addition they retained PM_{10} as the indicator for coarse PM, retained the existing PM_{10} 24-hour NAAQS of $150 \mu\text{g}/\text{m}^3$, and revoked the annual PM_{10} NAAQS (which had previously been set at $50 \mu\text{g}/\text{m}^3$). See 71 FR 61236.

On December 14, 2012, the USEPA promulgated the most recently revised primary annual $\text{PM}_{2.5}$ national ambient air quality standard (NAAQS). The $\text{PM}_{2.5}$ NAAQS was published in the Federal Register on January 15, 2013 [78 FR 3086]. In that action, the USEPA revised the primary annual $\text{PM}_{2.5}$ standard, strengthening it from $15.0 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. In that same action, USEPA retained the existing secondary annual standard for $\text{PM}_{2.5}$, the existing primary and secondary 24-hour standards for $\text{PM}_{2.5}$, and the existing primary and secondary standards for particulate matter with aerodynamic diameters of 10 microns or less (PM_{10}).

The $\text{PM}_{2.5}$ NAAQS establishes a limit on the acceptable exposure and public health impacts for fine particulate matter. These amendments to K.A.R. 28-19-300 implement the $\text{PM}_{2.5}$ NAAQS for Minor NSR.

3) If specific contaminants are to be controlled by the proposed regulations or amendment, a description indicating the level at which the contaminants are considered harmful according to current available research.

As discussed above this regulatory action is being proposed primarily to implement the $\text{PM}_{2.5}$ NAAQS for the Minor NSR permitting program, however the Kansas program applies to new sources or modifications at existing sources for *all criteria pollutants* in all areas of the state. USEPA has promulgated NAAQS for each air pollutant for which air quality criteria have been published. To date, NAAQS have been promulgated for six criteria pollutants: ozone, particulate matter, sulfur oxides, nitrogen oxides, carbon monoxide, and lead (further details can be found at USEPA's NAAQS website, <http://www3.epa.gov/ttn/naaqs/criteria.html>).

K.A.R. 28-19-300 also addresses sources emitting hazardous air pollutants (HAPs). Under Section 112(b) of the CAA, Congress established the list of HAPs that were shown to provide a threat of adverse human health effects. The USEPA has conducted or utilized research on the health effects of the various HAPs, which

has guided their promulgation of emission standards. Emission standards are necessary to reduce emissions released into the atmosphere to attain the air quality standards that are specified in the CAA. Each standard has been subjected to peer review and often to litigation (Further details can be found at USEPA's Air Toxics website, <http://www.epa.gov/ttn/atw/area/arearules.html>).

II. Economic Benefit Statement

1) Are the proposed regulations or amendments mandated by federal law as a requirement for participating in or implementing a federally subsidized or assisted program?

Yes. KDHE's authority to fully implement the Clean Air Act programs, which are in part funded through grants from the USEPA, is maintained by assuring that all state program elements are current and consistent with the terms of the federal requirements that KDHE implements.

2) Do the proposed amendments exceed the requirements of applicable Federal law?

No. The proposed amendments to K.A.R. 28-19-300 do not exceed requirements of applicable federal law.

3) Description of costs to agencies, to the general public and to persons who are affected by, or are subject to, the regulations:

a) Capital and annual costs of compliance with the proposed amendments and the persons who will bear those costs.

The proposed amendments impose no new capital costs to the implementing agency or to the general public. The elimination of the Acid Rain permitting requirements will lessen both the burden and cost to Acid Rain sources in Kansas and the permitting authority.

The USEPA determined the expansion of the NSR program to cover PM_{2.5} and its precursors to increase only marginally the costs to owners and operators of PM_{2.5} sources that become subject to the program [73 FR 28345, May 16, 2008]. They expected the rule changes to increase the burden associated with only major NSR permitting under PSD and NA NSR.

b) Initial and annual costs of implementing and enforcing the proposed amendments, including the estimated amount of paperwork, and the state agencies, other governmental agencies or other persons or entities who will bear the costs.

There are no initial or annual costs associated with the implementation and enforcement of the proposed amendments. The USEPA determined that the addition of PM_{2.5} to the NSR Program is unlikely to increase significantly the number of NSR permits that must be issued, but may add to the analyses that sources and Federal, State, and local reviewing authorities must conduct as part of the construction permit application and review process. They expected the rule changes to increase the burden associated with only major NSR permitting under PSD and NA NSR. Additionally, once the Acid Rain requirements are eliminated from the current program there will be a reduction in associated paperwork and costs.

c) Costs which would likely accrue if the proposed regulations are not adopted, the persons who will bear the costs and those who will be affected by the failure to adopt the regulations.

The costs that would likely accrue if the proposed regulations are not adopted would be only those associated with the current requirements relating to Acid Rain affected sources remaining in place.

d) A detailed statement of the data and methodology used in estimating the costs used in the statement.

Not applicable.

e) Description of any less costly or less intrusive methods that were considered by the agency and why such methods were rejected in favor of the proposed regulations.

No less costly or intrusive method was identified in the process of developing the proposed amendments to K.A.R. 28-19-300.

f) Consultation with League of Kansas Municipalities, Kansas Association of Counties, and Kansas Association of School Boards.

Copies of the regulation, the regulatory impact statement, and the notice of hearing will be provided electronically to these organizations at the time of publication of the Notice of Hearing in the *Kansas Register*.