



Division of Environment
Bureau of Air

ENVIRONMENTAL AND ECONOMIC BENEFIT STATEMENT

Pursuant to K.S.A. 77-416

**PROPOSED AMENDMENT OF EXISTING AIR QUALITY REGULATION:
K.A.R. 28-19-720**

May 2019

Background of Proposed Amendments

The Bureau of Air of the Kansas Department of Health and Environment (KDHE) is proposing to amend certain Kansas Air Quality Regulations, specifically Kansas Administrative Regulation (K.A.R.) 28-19-720, “New Source Performance Standards” (NSPS). Operating under delegated authority from the Environmental Protection Agency (EPA), the state of Kansas has been designated the primary authority to implement and enforce federal standards that are adopted into the state regulations. An agreement signed in May of 1986 specifically granted the state the authority for the NSPS which are adopted in K.A.R. 28-19-720. This 1986 document spells out the procedures and conditions wherein the authority is automatically delegated to Kansas upon the incorporation of the standard into Kansas regulation.

To date, the state authority for NSPS exists only for the federal rules promulgated by the EPA through June 30, 2010, this is the date of the last adoption of Title 40 of the Code of Federal Regulations, part 60 (40 C.F.R. part 60) by Kansas. Facilities in Kansas are nonetheless subject to provisions of the federal rules adopted after July 1, 2010, which the EPA has full authority to implement and enforce. The state must adopt new and revised federal regulations to gain primacy for those federal provisions. Thus, the basic purpose of the proposed amendments are to update K.A.R. 28-19-720 to incorporate the federal changes made to the respective standards since the last update of the state regulations. K.A.R. 28-19-720 is specifically being updated to incorporate amendments to 40 C.F.R. part 60 up to July 1, 2017.

K.A.R. 28-19-720: New Source Performance Standards (NSPS)

K.A.R. 28-19-720 implements the federal NSPS provisions as state requirements under the Kansas Air Quality Act. The pollutants of concern under the NSPS are the criteria pollutants for which national ambient air quality standards (NAAQS) are established in 40 C.F.R. Part 50. These are: sulfur dioxide, nitrogen dioxide, ozone, particulate matter, lead, and carbon monoxide. Section 111 of the Clean Air Act (CAA) directs the EPA to develop regulations implementing emissions standards of the relevant pollutants for new stationary sources. The Federal NSPS provisions are codified at 40 C.F.R. part 60, and regulate new, modified or reconstructed facilities within each of several defined categories. They also establish performance standards for the operation of the facilities, which promotes the facility to reduce emissions of relevant air pollutants.

The NSPS include emissions limitations, work practices, and other enforceable methods for accomplishing the goal of reducing air pollutant emissions from these sources. The following table lists the relevant NSPS provisions that have been amended or promulgated from July 1, 2010 through June 30, 2017. Detailed summaries of amendments are provided in Appendix A of this document. The table below provides the following information in chronological order: the part or subpart of the rule being amended, the *Federal Register* publication citation and date, and a short description of the rule.

Part/Subpart	Federal Register Publication Citation/ Date	Description
60.17 Subpart A; 60.62-60.64, 60.66 Subpart F; Part 60 Appendices B and F	<u>75 FR 54970</u> September 9, 2010	Portland Cement Plants
60.4 Subpart A	<u>75 FR 55274</u> September 10, 2010	General Provisions - Address
60.8 Subpart A; Part 60 Appendices A-3 through A-8	<u>75 FR 55636</u> September 13, 2010	Performance tests
60.4 Subpart A	<u>75 FR 69348</u> November 12, 2010	General Provisions - Address
60.17 Subpart A	<u>76 FR 2832</u> January 18, 2011	General Provisions for Portland Cement Plants
60.42, 60.45 Subpart D; 60.48Da-60.49Da Subpart Da; 60.42Db, 60.48Db Subpart Db; 60.47c Subpart Dc	<u>76 FR 3517</u> January 20, 2011	Fossil-Fuel-Fired, Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial Institutional Steam Generating Units
Part 60 Table 1	<u>76 FR 10761</u> February 28, 2011	Delegation of Authority
60.17 Subpart A; 60.2005, 60.2015-60.2030, 60.2045, 60.2070, 60.2085, 60.2105-60.2155, 60.2170, 60.2175, 60.2210, 60.2220, 60.2230, 60.2235, 60.2242, 60.2250, 60.2260, 60.2265, Table 1, Tables 4 - 8 Subpart CCCC; 60.2500, 60.2505, 60.2525, 60.2535, 60.2540, 60.2541, 60.2542, 60.2545, 60.2550, 60.2555, 60.2558, 60.2635, 60.2650, 60.2670- 60.2720, 60.2730-60.2740, 60.2770, 60.2780, 60.2790, 60.2795, 60.2805, 60.2860, 60.2870, 60.2875, Table 1, Table 2, Tables 4 - 9 Subpart DDDD; 60.4760 - 60.4930, Tables 1- 5 Subpart LLLL; 60.5000 - 60.5250, Tables 1-6 Subpart MMMM	<u>76 FR 15704</u> March 21, 2011	Commercial and Industrial Solid Waste Incineration Units
60.32e, 60.39e, Table 1A Subpart Ce, 60.58c, Table 1A Subpart Ec, Table 1B Subpart Ec	<u>76 FR 18407</u> April 4, 2011	Hospital/Medical/Infectious Waste Incinerators
Part 60 – Actions on petitions	<u>76 FR 28318</u> May 17, 2011	Portland Cement Plants

Part/Subpart	Federal Register Publication Citation/ Date	Description
Part 60 Subparts CCCC and DDDD	<u>76 FR 28662</u> May 18, 2011	Industrial, Commercial, and Institutional Boilers and Process Heaters and Commercial and Industrial Solid Waste Incineration Units
60.4200-60.4217, 60.4219, Table 3 Subpart IIII; 60.4230-60.4231, 60.4233, 60.4236, 60.4241, 60.4243, 60.4248, Tables 1-2 Subpart JJJJ	<u>76 FR 37954</u> June 28, 2011	Stationary Compression Ignition and Spark Ignition Internal Combustion Engines
60.4 Subpart A	<u>76 FR 38024</u> June 29, 2011	CFR Correction
60.17 Subpart A; Part 60 Appendix A-7	<u>77 FR 2456</u> January 18, 2012	General Provisions- Incorporation by reference; Test Methods
Part 60 Appendix F	<u>77 FR 8160</u> February 14, 2012	Quality Assurance Procedures
60.17 Subpart A; 60.21, 60.24 Subpart B; 60.40, 60.41, 60.42, 60.45 Subpart D; 60.40Da-60.45Da, 60.47Da-60.52Da Subpart Da; 60.40b-60.41b, 60.43b-60.44b, 60.46b, 60.48b-60.49b Subpart Db; 60.40c-60.43c, 60.45c, 60.47c Subpart Dc	<u>77 FR 9304</u> February 16, 2012	Coal- and Oil-Fired Electric Utility Steam Generating Units
Part 60 – Appendix F	<u>77 FR 13977</u> March 8, 2012	Quality Assurance Procedures
Part 60	<u>77 FR 18709</u> March 28, 2012	Quality Assurance Procedures
60.41Da, 60.49Da Subpart Da	<u>77 FR 23399</u> April 19, 2012	CFR Correction
Part 60 – Actions on petitions	<u>77 FR 25087</u> April 27, 2012	Sewage Sludge Incineration Units
Part 60 Appendix A-6	<u>77 FR 44488</u> July 30, 2012	Test Methods
60.17, 60.70 Subpart A; 60.70a-60.77a Subpart Ga	<u>77 FR 48433</u> August 14, 2012	Nitric Acid Plants
60.17 Subpart A; 60.630 Subpart KKK; 60.640 Subpart LLL; 60.5360-60.5430, Tables 1-3 Subpart OOOO	<u>77 FR 49490</u> August 16, 2012	Oil and Natural Gas Sector
60.17 Subpart A; 60.100, 60.101, 60.106, Subpart J; 60.100a, 60.101a, 60.103a, 60.107a, 60.109a Subpart Ja	<u>77 FR 56422</u> September 12, 2012	Petroleum Refineries
60.17 Subpart A; 60.4207, 60.4211, 60.4214, 60.4219 Subpart IIII; 60.4231, 60.4243, 60.4245, 60.4248 Table 2, Subpart JJJJ	<u>78 FR 6674</u> January 30, 2013	Reciprocating Internal Combustion Engines
60.2005, 60.2015, 60.2020, 60.2030, 60.2045, 60.2105, 60.2110, 60.2115, 60.2120, 60.2140, 60.2145, 60.2165, 60.2170, 60.2175, 60.2210, 60.2235, 60.2265, Tables 1, 2, 5-8 Subpart CCCC; 60.2505, 60.2525, 60.2535, 60.2545, 60.2550, 60.2555, 60.2675, 60.2680, 60.2685, 60.2690, 60.2710, 60.2720, 60.2730, 60.2740, 60.2770, 60.2795, 60.2875, Tables 1, 2, 6-9 Subpart DDDD	<u>78 FR 9112</u> February 7, 2013	Solid Waste Incineration Units

Part/Subpart	Federal Register Publication Citation/ Date	Description
60.61, 60.62, 60.63, 60.64, 60.65, 60.66 Subpart F	<u>78 FR 10006</u> February 12, 2013	Portland Cement Plants
60.41Da, 60.42Da, 60.48Da, 60.49Da, 60.50Da Subpart Da	<u>78 FR 24073</u> April 24, 2013	Coal- and Oil-Fired Electric Utility Steam Generating Units
60.56c Subpart Ec	<u>78 FR 28052</u> May 13, 2013	Hospital/Medical/Infectious Waste Incinerators
60.4 Subpart A	<u>78 FR 37973</u> June 25, 2013	CFR Correction
60.5365, 60.5380, 60.5390, 60.5395, 60.5410-60.5413, 60.5415-60.5417, 60.5420, 60.5430, Tables 1 and 2 Subpart OOOO	<u>78 FR 58416</u> September 23, 2013	Oil and Natural Gas Sector
Table I Part 60	<u>78 FR 71510</u> November 29, 2013	Delegation of Authority
60.101a Subpart Ja	<u>78 FR 76753</u> December 19, 2013	Petroleum Refineries
60.8, 60.13, 60.17, Subpart A; 60.46b, 60.47b Subpart Db; 60.51c Subpart Ec; 60.84 Subpart H; 60.154 Subpart O; 60.284 Subpart BB; 60.335 Subpart GG; 60.374 Subpart KK; 60.382, 60.386 Subpart LL; 60.472 Subpart UU; 60.660, 60.665 Subpart NNN; Table 7 Subpart IIII; Table 2 Subpart JJJJ; Appendices A-1 through A-8; Appendix B, Appendix F Part 60	<u>79 FR 11228</u> February 27, 2014	Test Methods
60.17, 60.280 Subpart A; 60.280a-260.288a Subpart BBa;	<u>79 FR 18952</u> April 4, 2014	Kraft Pulp Mills
60.75a Subpart Ga	<u>79 FR 25681</u> May 6, 2014	CFR Correction
Appendix F Part 60	<u>79 FR 28439</u> May 16, 2014	Quality Assurance Requirements
60.42Da Subpart Da	<u>79 FR 68777</u> November 19, 2014	Coal- and Oil-Fired Electric Utility Steam Generating Units
60.5365, 60.5375, 60.5385, 60.5390, 60.5395, 60.5401, 60.5410-60.5416, 60.5420, 60.5430 Subpart OOOO	<u>79 FR 79018</u> December 31, 2014	Oil and Natural Gas Sector
Table 1 Part 60	<u>80 FR 10596</u> February 27, 2015	Delegation of authority
60.17 Subpart A; 60.530-60.539b Subpart AAA; 60.5472-60.5483 Subpart QQQQ; Appendices A-8 and I Part 60	<u>80 FR 13672</u> March 16, 2015	New Residential Wood Heaters, New Hydronic Heaters and Forced-Air Heaters
Appendices B and F Part 60	<u>80 FR 38628</u> July 7, 2015	Performance Specifications

Part/Subpart	Federal Register Publication Citation/ Date	Description
60.61-60.64 Subpart F	<u>80 FR 44772</u> July 27, 2015	Portland Cement Plants
60.5365, 60.5430 Subpart OOOO	<u>80 FR 48262</u> August 12, 2015	Oil and Gas Sector
60.200, 60.201, 60.203, 60.205 Subpart T; 60.210, 60.211, 60.213, 60.215 Subpart U; 60.223-60.225 Subpart V; 60.230, 60.233, 60.235 Subpart W; 60.243, 60.245 Subpart X	<u>80 FR 50386</u> August 19, 2015	Phosphoric Acid Manufacturing and Phosphate Fertilizer Production
60.17 Subpart A; 60.5508-60.5580, Tables 1, 2, 3 Subpart TTTT; 60.5700-60.5880, Tables 1, 2, 3, 4 Subpart UUUU	<u>80 FR 64510</u> October 23, 2015	Electric Utility Generating Units
60.105 Subpart J; 60.100a-60.102a, 60.104a-60.107a Subpart Ja	<u>80 FR 75178</u> December 1, 2015	Petroleum Refineries
60.48Da Subpart Da	<u>81 FR 20172</u> April 6, 2016	CFR Correction
Appendices B and F Part 60	<u>81 FR 31515</u> May 19, 2016	Performance Specifications
60.17 Subpart A; 60.5360-60.5370, 60.5410-60.5413, 60.5415, 60.5416, 60.5420, 60.5430, Table 3 Subpart OOOO; 60.5360a-60.5390a, 60.5395a, 60.5397a, 60.5398a, 60.5400a-60.5402a 60.5405a-60.5408a, 60.5410a-60.5413a, 60.5415a-60.5417a, 60.5420a-60.5423a, 60.5425a, 60.5430a, 60.5432a, 60.5433a, Tables 1, 2, 3 Subpart OOOOa	<u>81 FR 35824</u> June 3, 2016	Oil and Natural Gas Sector
60.2000-60.2265 Subpart CCCC; 60.2500-60.2875 Subpart DDDD	<u>81 FR 40956</u> June 23, 2016	Commercial and Industrial Solid Waste Incineration Units
60.13, 60.332, 60.562, 60.543, 60.614, 60.643, 60.664, 60.5410, 60.5415, 60.332, Table 1 Subpart KKKK	<u>81 FR 42542</u> June 30, 2016	CFR Correction
Part 60	<u>81 FR 52346</u> August 8, 2016	Actions on petitions
Part 60	<u>81 FR 52778</u> August 10, 2016	Actions on Petitions
60.8, 60.17, 60.4245 Table 2 Subpart JJJJ; Appendices A-1, A-2, A-3, A-4, A-5, A-6, A-7. A-8 Part 60	<u>81 FR 59800</u> August 30, 2016	Test Methods, Performance Specifications, and Testing Regulations for Air Emission Sources
Appendix F Part 60	<u>81 FR 83160</u> November 21, 2016	Quality Assurance Requirements
Appendix F Part 60	<u>82 FR 10711</u> February 15, 2017	Quality Assurance Requirements
60.5393a, 60.5397a, 60.5410a, 60.5411a, 60.5415a, 60.5416a, 60.5420a Subpart OOOOa	<u>82 FR 25730</u> June 5, 2017	Oil and Natural Gas Sector
60.17 Subpart A	<u>82 FR 28561</u> June 23, 2017	CFR Correction

I. Environmental Benefit Statement

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

a) Need

These amendments are needed to maintain the state's authority under existing delegation agreements to administer the federal regulations and to ensure that the Kansas Air Quality Regulations are current and consistent with the federal requirements. The state is delegated primary authority for the NSPS standards adopted under the Kansas Air Quality Regulation proposed herein for amendment. However, with respect to federal changes (additions, revocations, or amendments) made to these standards since the last date of state adoption, and in accordance with the state-EPA delegation agreement, the state must adopt these new provisions and notify EPA of the updated state authority to implement and enforce such standards. Currently, the EPA is the implementing authority in the state for the standards promulgated after July 1, 2010. There exists a split in the authority to enforce these rules, with Kansas primacy for rules in effect on July 1, 2010 and EPA for those after. This split or dual regulatory authority for implementation and enforcement of the standards subject to this rule-making could result in loss of consistency of application and possible confusion for the regulated community regarding the relative roles of the state and federal agencies. This adoption of changes, followed by the notice to EPA of the updated delegation and authority, will resolve these potential problems.

b) Environmental benefit

The proposed revisions are not expected to result in specific environmental benefits beyond those already achieved by the federal promulgation. All affected facilities are currently subject to the standards. One of the major benefits of state promulgation is that affected facilities will be able to work with the state, rather than the EPA, to achieve compliance. Providing implementation at the state level will enhance the consistency in the application of the regulations.

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.

For the NSPS, which address criteria pollutants, Section 109 of the CAA directs the EPA Administrator to set the national primary ambient air quality standards (NAAQS) for each of the criteria pollutants at levels "the

attainment and maintenance of which ... are requisite to protect the public health.” (42 U.S.C. §7409(b)(1)). The EPA has conducted or utilized research on the health effects of the various pollutants that have guided their promulgation of the standards being adopted. This began with the establishment of the NAAQS, and continues with the creation and updating of emissions standards necessary to reduce emissions to attain and maintain the air quality within the NAAQS levels. Each standard has been subjected to peer review and often to litigation. General criteria pollutant information can be found at EPA’s NAAQS website, <https://www.epa.gov/naaqs>. EPA’s Air Research homepage provides links to additional tools and information; <https://www.epa.gov/air-research/>. EPA also provides a website for learning about studies used in EPA’s science assessments, which is available at <http://hero.epa.gov/index.cfm>. Supporting and related materials for individual NSPS standards and amendments are available in their corresponding docket at <http://www.regulations.gov>.

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 noted above, development of the NAAQS have been made at the federal level through extensive research; the state rules are no more stringent than the federal rules. EPA 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 (see table below). Units of measure for the standards are parts per million (ppm) by volume, parts per billion (ppb) by volume, and micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$).

National Ambient Air Quality Standards

Pollutant	Primary/ Secondary	Averaging Time	Level	Form	
Carbon Monoxide	primary	8-hour	9 ppm	Not to be exceeded more than once per year	
		1-hour	35 ppm		
Lead	primary and secondary	Rolling 3 month average	0.15 µg/m ³ ⁽¹⁾	Not to be exceeded	
Nitrogen Dioxide	primary	1-hour	100 ppb	98th percentile, averaged over 3 years	
	primary and secondary	Annual	53 ppb ⁽²⁾	Annual Mean	
Ozone	primary and secondary	8-hour	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
Particle Pollution	PM _{2.5}	primary	Annual	12 µg/m ³	annual mean, averaged over 3 years
		secondary	Annual	15 µg/m ³	annual mean, averaged over 3 years
		primary and secondary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide	primary	1-hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m³ as a calendar quarter average) also remain in effect.

(2) The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards additionally remain in effect in some areas. Revocation of the previous (2008) O₃ standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.

(4) The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.