

**Significant Impact Levels (SILs), National Ambient Air Quality Standards (NAAQS),
PSD Class II Increments, and Significant Monitoring Concentrations for Criteria Pollutants
Kansas Department of Health and Environment, Bureau of Air- Modeling Group**

| Pollutant | Averaging Period | SIL $\mu\text{g}/\text{m}^3$ | NAAQS $\mu\text{g}/\text{m}^3$ (ppb) | Form of NAAQS Standard ^[a] | | PSD Class II Increment | Form of Class II Increment Standard | | Significant Monitoring Concentration ^[b] $\mu\text{g}/\text{m}^3$ |
|-------------------|-------------------------|------------------------------|----------------------------------------|----------------------------------------------------------------------|---------------------------------------------|------------------------|---------------------------------------------|----------------------------|------------------------------------------------------------------------------|
| | | | | | | | | | |
| NO ₂ | 1-hour | 10 ^[c] | 188 (100) | H8H ^[d] | Tyler Fox EPA memo, 6/29/2010 and 3/01/2011 | -- ^[e] | -- | -- | NA |
| | Annual | 1 | 100 (53) ^[f] | Annual arithmetic mean | Appendix W Section 7.2.1.1 | 25 | NTBE ^[g] | Appendix W Section 7.2.1.1 | 14 |
| SO ₂ | 1-hour | 10 ^[c] | 196 (75) | H4H ^[h] | Stephen Page EPA memo, 8/23/2010 | -- ^[e] | -- | -- | NA |
| | 3-hour | 25 | 1309 (500) ^[i] | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | 512 | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | NA |
| | 24-hour | 5 | | Revoked ^[j] | | 91 | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | 13 |
| | Annual | 1 | | Revoked ^[k] | | 20 | NTBE ^[g] | Appendix W Section 7.2.1.1 | NA |
| PM _{2.5} | 24-hour | 1.2 | 35 ^[l] | H8H ^l | Stephen Page memo, 5/20/2014 | 9 | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | 0 ^[m] |
| | Annual | 0.3 | 12 ^[n] 15 ^[i] | Annual arithmetic mean, averaged over 3 years | | 4 | NTBE ^[g] | Appendix W Section 7.2.1.1 | NA |
| PM ₁₀ | 24-hour | 5 | 150 ^[f] | NTBE ^[g] more than once per year on average over 3 years. | Stephen Page memo, 5/20/2014 | 30 | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | 10 |
| | Annual | 1 | | Revoked ^[o] | | 17 | NTBE ^[g] | Appendix W Section 7.2.1.1 | NA |
| CO | 1-hour | 2000 | 40,000 (35,000) ^[p] | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | - | - | - | NA |
| | 8-hour | 500 | 10,000 (9,000) ^[p] | NTBE ^[g] more than once per year | Appendix W Section 7.2.1.1 | - | - | - | 575 |
| Lead | Rolling 3-month average | NA | 0.15 ^[f] | NTBE ^[g] | | - | - | - | 0.1 |

^[a] Form of the standard assumes 5 years of meteorological data. If using on-site gathered meteorological data, the form of the standard would be based on at least one year of on-site data.

^[b] No *de minimis* air quality level is provided for ozone monitoring. However, any net emissions increase of 100 tons per year or more of VOC or NO_x subject to PSD would be required to perform an ambient impact analysis including gathering of air quality data.

^[c] These KDHE-established interim SILs are to be valid until the EPA promulgated SILs are effective and adopted in Kansas air quality regulations.

^[d] Based on the 3-year average of the 98th percentile of annual distribution of daily maximum 1-hour NO₂ concentrations. Refer to [75 FR 6474](#) and EPA Memo dated [June 29, 2010](#) and [March 1, 2011](#).

^[e] PSD increments, Modeling Significance Levels, and Monitoring De Minimis Concentration level for the 1-hour SO₂ and NO₂ standards have not yet been proposed. However, EPA provided interim 1-hour Modeling SILs of 3 ppb for SO₂ and 4 ppb for NO₂ in general guidance implementation memos dated [8/23/2013](#) and [6/26/2010](#), respectively.

^[f] Refers to primary and secondary standards.

^[g] Not to be exceeded (NTBE).

^[h] Based on the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour SO₂ concentrations. Refer [75 FR 35520](#) and to EPA Memo dated [8/23/2010](#).

^[i] Refers to secondary NAAQS, otherwise it is primary NAAQS in the same column.

^[j] The primary 24-hour SO₂ NAAQS of 140 ppb (365 $\mu\text{g}/\text{m}^3$) was revoked effective 8/23/10 ([75 FR 35520](#)).

^[k] The primary annual SO₂ NAAQS of 30 ppb (80 $\mu\text{g}/\text{m}^3$) was revoked effective 8/23/2010 ([75 FR 35520](#)). The secondary annual SO₂ NAAQS of 20 ppb was revoked in 1973 (38 FR 25678).

^[l] Based on the 3-year average of the 98th percentile of annual distribution of daily maximum 24-hour PM_{2.5} concentrations. Refer to [78 FR 3086](#) and EPA Memo dated [5/20/2014](#).

^[m] On December 9, 2013, EPA removed the vacated PM_{2.5} SMC of 4 $\mu\text{g}/\text{m}^3$ (24-hour average as per [75 FR 64864](#)) based on the ruling of U.S. D.C. Court of Appeals ([78 FR 73698](#)).

^[n] EPA revised the primary annual PM_{2.5} NAAQS to 12 $\mu\text{g}/\text{m}^3$ (previously 15 $\mu\text{g}/\text{m}^3$) effective 3/18/2013. Refer to [78 FR 3086](#) and EPA Memo dated [5/20/2014](#).

^[o] The primary and secondary annual PM₁₀ NAAQS of 50 $\mu\text{g}/\text{m}^3$ was revoked effective 12/18/2006. Refer to [71 FR 61144](#) and EPA Memo dated [3/23/2010](#).

^[p] Secondary 1-hour and 8-hour standards for CO were revoked in 1985 (50 FR 37484).