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# EPA's New National Ambient Air Quality Standard for Sulfur Dioxide (SO<sub>2</sub>)

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**Sunil Kumar**

MWAQC

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# Final Standard

- New SO<sub>2</sub> Standard (published June 22, 2010):
  - 1-hour SO<sub>2</sub> standard - **75 ppb**.
- 1971 SO<sub>2</sub> standards:
  - Annual average - 30 ppb
  - 24-Hour average – 140 ppb
  - Both annual & 24-hour average standards above have been discontinued.

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# Final Standard

- Form of Standard –
  - 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations.
- Changes to SO<sub>2</sub> monitoring network & reporting requirements.
- Air Quality Index (AQI) revised based on the new 1-hour standard.

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# Why a 1-hour standard ?

- Little health evidence to suggest an association between long-term exposure to SO<sub>2</sub> and public health effects.
- New 1-hour standard would better protect public by reducing people's exposure to high short-term (5 minutes to 24 hours) SO<sub>2</sub> concentrations.
- New 1-hour standard would continue to prevent SO<sub>2</sub> concentrations from exceeding the old 24-hour and annual standards.

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# Compliance with the New Standard

- Hybrid approach (monitoring/modeling) to assess compliance with the 1-hour standard
  - Modeling approach - Medium to larger sources
  - Monitoring approach - Smaller sources and sources not as conducive to modeling
- Draft Modeling and implementation guidance expected soon

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# Monitoring Network

- Washington region - 3 monitors needed at locations of expected maximum short-term concentrations (EPA criteria)
- Existing SO<sub>2</sub> network (of 3 monitors) - Not primarily configured for the above criteria of location.
- States & EPA – Will work together on deciding monitor locations.
- All new monitors operational by Jan. 1, 2013

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# Designation Approach

- Presumptive nonattainment boundary = County (unless state demonstrates otherwise)
  - Different from “Nonattainment region” consisting of a group of counties approach used for ozone & PM2.5
  - SO2 a local issue, not a regional issue like ozone and PM2.5
- Initial designations - based on data from existing monitors and, where provided by states, appropriate modeling
- Highest Design Value (2007-09 data):
  - 36 ppb (Alexandria, VA)

# Implementation Schedule

<b>Milestone</b>	<b>Date</b>
Final Rule	June 22, 2010
State Designation Recommendation	June 2011
EPA Designations	June 2012
SIP (Attainment & Unclassifiable Areas)	June 2013
SIP (Nonattainment Area)	February 2014
Attainment Date	August 2017