## Fact Sheet Proposed Data Requirements Rule for the 1-Hour Sulfur Dioxide Primary National Ambient Air Quality Standard (NAAQS)

## ACTION

- On April 17, 2014, the U.S. Environmental Protection Agency (EPA) proposed requirements for air agencies to characterize sulfur dioxide (SO<sub>2</sub>) air quality more extensively across the country for purposes of implementing the 1-hour SO<sub>2</sub> National Air Ambient Quality Standards (NAAQS). This approach would focus on characterizing air quality in areas with large sources of SO<sub>2</sub> emissions, and include smaller sources in areas with higher population. This action proposes a reasonable schedule for state and tribal air agencies to characterize air quality and provide that air quality data to the EPA.
- Air agencies would have the flexibility to characterize air quality using either modeling
  of actual source emissions or using appropriately sited ambient air quality monitors. The
  EPA intends to use these data in two future rounds of area designations in 2017 and 2020.
  Air quality modeling for SO2 has been demonstrated to be an effective way to assess
  local air quality and may be a cost effective alternative to air quality monitoring in many
  circumstances.
- The proposed rule includes options for emissions thresholds which would identify the sources around which air agencies would need to characterize SO<sub>2</sub> air quality. To increase public health protection in more highly populated areas, each option includes a lower annual emissions threshold for sources located in metropolitan areas greater than 1 million in population, and a higher threshold for sources outside these areas.
  - Option 1 would cover sources greater than 1000 tons of SO<sub>2</sub> in metro areas with population greater than 1 million; and sources greater than 2000 tons everywhere else.
  - Option 2 would cover sources greater than 2000 tons of SO<sub>2</sub> in metro areas with population greater than 1 million; and sources greater than 5000 tons everywhere else.
  - Option 3 would cover sources greater than 3000 tons of SO<sub>2</sub> in metro areas with population greater than 1 million; and sources greater than 10,000 tons everywhere else.
- Air agencies can avoid a nonattainment designation for an area by working with sources to establish permanent and enforceable emission limitations that show attainment with the SO<sub>2</sub> standards through modeling prior to the next round of designations in 2017. Compliance with other emission reduction programs, such as the Mercury and Air Toxics Standards for power plants and emission standards for boilers, may help these areas improve ambient SO<sub>2</sub> air quality earlier.
- In July 2013, the EPA identified or "designated" as nonattainment, 29 areas in 16 states where monitored air quality showed violations of the 2010 1-hour standard. The EPA based these nonattainment designations on certified air quality monitoring data provided

by the states as well as an assessment of other factors (such as nearby emission sources and weather patterns) that contribute to the monitored levels. These areas are now taking steps to reduce  $SO_2$  emissions and improve air quality.

### PROPOSED IMPLEMENTATION APPROACH

- The EPA's Comprehensive Implementation Strategy for the 2010 SO<sub>2</sub> standard lays out a commonsense approach that focuses resources on identifying and addressing unhealthy levels of SO<sub>2</sub>. In developing the strategy, the EPA carefully considered stakeholder feedback obtained during an extensive outreach process.
- By January 15, 2016, air agencies would be required to submit to the relevant EPA Regional Administrator a final list identifying the specific sources in the state around which SO<sub>2</sub> air quality is to be characterized, and indicating the air agency's approach to characterizing air quality around the source either through monitoring, modeling or a combination.
- For source areas that the air agency identifies would be evaluated through air quality modeling, the EPA proposes that the air agency must also provide a modeling protocol to the EPA Regional Administrator by January 15, 2016.
- The EPA intends to conduct a second phase of designations during 2017, relying on modeling analyses and other related information and to notify the states of intended designations by August 2017. The EPA therefore encourages states to submit modeling analyses and updated designation recommendations by January 13, 2017. By December 2017, the EPA intends to issue final designations for areas with modeled violations.
- Air agencies may elect to characterize air quality around some or all sources through ambient SO<sub>2</sub> monitoring, using existing and new monitoring sites. The EPA proposes that air agencies be required to submit relevant information about these monitoring sites to the EPA Regional Administrator by July 1, 2016, as part of their annual monitoring network plan, in accordance with the EPA's monitoring requirements specified in 40 CFR part 58. States electing to monitor to satisfy this rule will need to take specific actions to identify, relocate and/or install new ambient SO<sub>2</sub> monitors that would characterize peak 1-hour SO<sub>2</sub> concentrations in areas around or impacted by identified SO<sub>2</sub> sources.
- The EPA proposes that air agencies that have chosen to characterize air quality for certain SO<sub>2</sub> sources through ambient monitoring must have any relocated and/or new monitors operational by January 1, 2017. Air agencies will quality assure data from these monitors and submit it to the EPA Air Quality System in the same manner as is currently done for existing SO<sub>2</sub> monitors. Under this approach, it is anticipated that the first 3 years of data would be collected for calendar years 2017 through 2019; and using these data, the intended designations process for these areas would be completed in 2020.

 Recent Clean Air Act (CAA) rules will help states meet the revised SO<sub>2</sub> standard by reducing pollution both regionally and across the country. The schedule for designations and planning requirements in this rule aligns with the implementation schedules for national rules that will reduce SO<sub>2</sub> emissions – including the Mercury and Air Toxics Standards for power plants, and rules to control emissions from industrial boilers.

# BACKGROUND

- The CAA requires the EPA to issue designations after the agency sets a new NAAQS or revises an existing standard. Areas not meeting the standard are designated "nonattainment."
- On June 2, 2010, the EPA strengthened the primary SO<sub>2</sub> air quality standard. The revised standa<sub>r</sub>d will improve public health protection, especially for people with asthma, children and the elderly. In the final SO<sub>2</sub> standard rulemaking, the EPA provided initial thinking on how states and emission sources should implement the new 1-hour SO<sub>2</sub> standard.

On September 21, 2011, the EPA asked for public comment on draft guidance to states about how to implement the primary standard for SO<sub>2</sub>.

- In May-June 2012, the EPA held a series of stakeholder discussions with states, tribes and other interested parties to refine the agency's approach for implementing the SO<sub>2</sub> standard. To facilitate the discussion, the EPA developed a White Paper that identified important monitoring, modeling and implementation issues. The White Paper and summaries of the stakeholder discussions can be found on the EPA's website at: <a href="http://www.epa.gov/airquality/sulfurdioxide/implement.html">http://www.epa.gov/airquality/sulfurdioxide/implement.html</a>.
- Based on the input on the White Paper received from a diverse group of stakeholders, the EPA developed a comprehensive implementation strategy for the 2010 SO2 standard in February 2013. The strategy included the development of a regulation that would require states to further characterize air quality near large sources of emissions so that the air quality data could be the basis of future SO<sub>2</sub> designations. The strategy, "Next Steps for Area Designations and Implementation of the Sulfur Dioxide National Ambient Air Quality Standards," is available at:

http://www.epa.gov/airquality/sulfurdioxide/implement.html.

On August 5, 2013, the EPA published a rule which identified or "designated" 29 areas in 16 states as "nonattainment." (No areas in Indian Country were designated nonattainment as part of these designations.) The EPA based these nonattainment designations on the most recent set of certified air quality monitoring data as well as an assessment of nearby emission sources and weather patterns that contribute to the monitored levels. These areas now need to develop and implement plans to reduce pollution to meet the SO<sub>2</sub> standard.

• After evaluating and responding to stakeholder comments on a May 2013 draft, in January 2014, the EPA made available two updated draft documents that provide technical assistance for states implementing the 2010 health-based, SO2 standard. These documents provide technical advice on the use of air quality modeling (based on actual emissions data) and on properly siting ambient monitors to characterize peak 1-hour SO2 air quality in order to determine if an area meets the 2010 SO2 air quality standard. These technical assistance documents are available at: <a href="http://www.epa.gov/airquality/sulfurdioxide/implement.html">http://www.epa.gov/airquality/sulfurdioxide/implement.html</a>.

### HOW TO COMMENT

- The EPA will accept comments on this proposed rule for 60 days following publication in the *Federal Register*.
- Comments on the proposed federal plan requirements, identified by Docket ID No. EPA-HQ-OAR-2013--0711, can be submitted by one of the following methods:
  - *www.regulations.gov*: Follow the on-line instructions for submitting comments.
  - *Email*: Send your comments via electronic mail <u>to a-and-r-Docket@epa.gov</u>, Attention Docket ID No. EPA-HQ-OAR-2013-0711.
  - *Facsimile*: Fax your comments to (202) 566-9744, Attention Docket ID No. EPA-HQ-OAR-2013-0711.
  - Mail: Send your comments to: EPA Docket Center (EPA/DC), Environmental Protection Agency, Mailcode 6102T, 1200 Pennsylvania Ave., NW, Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2013-0711. Please include a total of two copies.
  - Hand Delivery: Deliver your comments to: EPA Docket Center (EPA/DC), William Jefferson Clinton Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC, 20004, Attention Docket ID No. EPA-HQ-OAR-2013-0711. Such deliveries are accepted only during the normal hours of operation (8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays), and special arrangements should be made for deliveries of boxed information.

#### FOR MORE INFORMATION

- To download a copy of this proposed rule, go to the EPA's website at: <u>http://www.epa.gov/airquality/sulfurdioxide/implement.html</u>.
- Today's Rule and other associated information are available either electronically at *http://www.regulations.gov*, the EPA's electronic public docket and comment system, or

in hardcopy at the EPA Docket Center's Public Reading Room. (Docket ID No. EPA-HQ-OAR-2013-0711)

- The Public Reading Room is located in the EPA Headquarters, Room Number 3334 in the William Jefferson Clinton West Building, located at 1301 Constitution Avenue, NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern standard time, Monday through Friday, excluding Federal holidays.
- Visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.