

High Level Summary of Meeting with Environmental Groups May 30, 2012

Introduction

This summary describes ideas and thoughts expressed by environmental group stakeholders (EGS) at the May 30 meeting with Environmental Protection Agency (EPA) staff regarding implementation of the 2010 primary 1-hour sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS). While the discussion covered many topics, there was strong participation on issues related to timing of regulatory actions and use of monitoring or modeling data, with the following general messages conveyed by the EGS:

There was strong support for using modeling to determine whether areas are meeting or not meeting the standard. Initially, it may be appropriate to focus the modeling on those areas with the largest SO₂ sources.

Although it is appropriate to designate as nonattainment those areas with current monitored violations, there are significant drawbacks with using monitoring data to implement the standard (e.g., length of time to deploy new monitors and gaps in spatial coverage).

This summary below is organized into three broad topics addressed in the White Paper: monitoring, modeling, and implementation. In addition, key subtopics addressed are thresholds (monitoring/modeling), future changes in emissions and actual emissions (modeling), hybrid approach, guidance/rulemaking, and timing (implementation). A list of participants is attached.

Limitations

Please note that this is a high level summary, reflecting concepts EPA heard during the meeting. It is not intended to be a full transcript or include all topics discussed. As EPA moves forward with implementation of the 2010 SO₂ NAAQS, the Agency will be informed both by concepts contained in this summary as well as concepts not described in this summary. Like all of the SO₂ implementation-related materials produced by EPA to date (e.g., the March 2011 and September 2011 guidance memoranda; the April 12, 2012 letters to state agencies and tribal representatives; and the May 2012 White Paper), this summary does not constitute final or binding agency action. These materials are part of an overall work in progress toward developing practicable approaches to implementing the SO₂ NAAQS that assure expeditious protection of public health. Ultimately, this stakeholder outreach process may lead to revised guidance or additional rulemaking.

Monitoring

Some of the EGS stated that use of monitoring data alone cannot be adequate since monitors cannot be placed in all necessary locations and since there is likely to be missing data. They indicated that missing data (and strengthening of the minimum data requirements) are especially important for the 1-hour SO₂ standard since only a few hours per year are key (since the standard is a 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations). They also felt strongly that the time needed to fully implement a monitoring-only approach would result in unacceptable delays in reducing SO₂ emissions that are affecting public health.

Some EGS indicated it is not clear how to determine the adequacy of a monitoring network with respect to either the number of monitors or the location of the monitors. They also expressed concern over getting the monitoring data in a timely fashion.

For these reasons, the EGS expressed a preference to rely on air quality modeling to estimate SO₂ concentrations, particularly around large SO₂ sources.

Thresholds

Some EGS stated they are open to the idea of a threshold concept, and they expressed a preference to use a threshold to prioritize the sources that should be modelled. Many EGS participants generally stated they could support a threshold approach in which the focus initially would be on the largest sources [e.g., the sources accounting for 90% (about 479 sources) to 93% (about 585 sources) of total SO₂ emissions].

They indicated that the Sierra Club modeling covered some sources in the 93% group (> 2,000 tons per year). However, some participants remained concerned about an approach that ignores smaller sources. Some EGS stated they would like to see an analysis supporting various thresholds to help determine that a specific threshold represents a reasonable resource burden. Some EGS asked EPA what percentage of sources present technical issues.

Modeling

Some EGS stated that modeling is more adaptable, flexible, and cheaper than monitoring. Some EGS added that the best data is from modeling since it is difficult to monitor at the location of maximum concentration, it is difficult to monitor emissions for all hours (e.g., monitor downtime), and they do not trust industry monitors. Some EGS stated that modeling is best for medium to large sources.

Some EGS stated that about 200 of the 479 sources that make up 90% of the SO₂ emissions are in areas without monitors and are not retiring. They believe this is a reasonable number to model since previous contractor assistance showed that one source can be modeled in four days and would cost about \$4,000 each. Some EGS suggested EPA should conduct or fund additional modeling. If not, then a few EGS indicated they may be willing to fund a contractor to model these sources.

Some EGS want EPA to issue guidance on what is acceptable modeling, in part, because States defer to EPA on such technical issues. Some EGS stated that EPA needs to provide modeling criteria to minimize debates over modeling issues. They noted that Virginia criticized the Sierra Club modeling due to the lack of an approved modeling protocol and that, while New Hampshire reviewed it, they are waiting for EPA guidance. They urged that this guidance be completed soon in order for modeling to be done and provided as part of the designations process.

Some EGS stated it is backwards to use modeling to site monitors. Instead modeling should be used to set emission limits.

Some EGS acknowledged special cases (e.g., highly complex terrain) where modeling might be less representative, but felt it would be a small fraction of cases and wanted data on what this fraction might be.

Actual Emissions

Some EGS stated that modeling by the Sierra Club used the actual 1-hour peak in the last year; i.e., the highest plant-wide emissions per year. Some EGS believe this is a conservative approach, but it is necessary for several reasons: (1) it is consistent with the 1-hour standard which addresses peak concentrations; (2) it is needed to balance with health considerations (including health impacts at 5 minutes and providing a margin of safety); and (3) since health effects occur at 75 ppb, the 3-year average represents a break for industry.

Some EGS also indicated that while it may be okay to use actual emissions, if the source exceeds that level of emissions in the future, then remodeling should be required.

Future Changes in Emissions

Some EGS express concern that the 2008 emissions inventory and 2008-2010 air quality data reflect the country's economic downturn and may not be representative of future years. They are also concerned that 2011 air quality data may reflect a transition to natural gas.

Some EGS stated that 110 of the larger sources (> 2,000 tons per year) may retire soon and that others are putting on scrubbers. While they felt that it makes sense not to focus attainment determination resources on sources that are not going to cause violations in the future, they believe it is necessary to have binding commitments for sources expected to retire. Some EGS noted this was also a key issue in the Regional Haze program.

Implementation

Many EGS agreed that EPA should move forward with designating as nonattainment those areas that show violations of the NAAQS from monitoring. In addition, many EGS wanted EPA to consider modeling in the initial designations for other areas.

In cases where monitoring data are absent and modeling indicates nonattainment, some EGS stated that EPA should use modeling data to designate nonattainment areas. Some EGS indicated that, given limited resources, the Agency should use the best data available.

Some EGS stated the Sierra Club modeling has included 70 of the sources representing 90% of total SO₂ emissions. They stated this modeling showed very large violations. Although the Sierra Club modeling was sent to EPA (and States), the EGS indicated they have not received any response from EPA. Some EGS want to know if EPA will use the Sierra Club modeling in the designation process.

Many EGS felt very strongly that EPA should avoid initially designating many areas as unclassifiable. Specifically, some EGS recommended that areas with large sources (90% category) should not be designated unclassifiable but should be resolved by June 2013. For the large sources, a few EGS said they believe that that states have enough time to do the modeling. Some EGS expressed skepticism that EPA would go back and redesignate unclassifiable areas.

Some EGS also stated that sources could take lower limits to avoid nonattainment designation. Sources that take lower limits would need the State to submit a SIP revision to EPA by June 2013 (as part of the infrastructure SIP) and come into compliance in a reasonable timeframe as provided in that SIP revision.

Some EGS stated that the path forward is to use the modeling data in hand (including Sierra Club modeling), use additional modeling that becomes available, and use actual emissions to set title V permit limits (as suggested in the White Paper).

Emission Limits

With respect to any future discussion about control strategy development, some EGS believe that sources cannot meet a 1-hour standard without 1-hour emissions limits. They noted that reliance on rules requiring 30-day average emission limits would not be sufficient. They view this as a critical issue and state that sources must take 1-hour emission limits consistent with modeling.

Guidance/Rulemaking

Some EGS stated that EPA does not need rulemaking to require modeling. They stated that EPA rulemaking is not necessary with respect to the use of available data. Rather, EPA should use the best science available and the best data in front of the Agency in the designations process.

Some EGS also stated that EPA should issue guidance saying the Agency will consider both modeling and monitoring data and provide guidance identifying criteria for this modeling and monitoring.

Timing

Several EGS stated that areas should be designated attainment or nonattainment, not unclassifiable. Some EGS suggested they would oppose any concept for unclassifiable areas that might rely on an EPA promise to do something later.

Some EGS stated that, historically, EPA does not do rulemaking for a second round of designations. Some EGS suggested that designating areas unclassified is the same as punting and is wrong. Rather, EPA should use the available data and not delay.

Some EGS specifically indicated that delaying SO₂ action (such as initially designating areas unclassifiable pending deployment of monitors) would provide the wrong incentive to industry. Because the industry is currently dealing with many regulatory drivers (i.e., the Cross-State Air Pollution Rule and Mercury and Air Toxics Standards), several EGS believe EPA needs to provide industry with clear guidance for implementation of the SO₂ NAAQS. With that guidance, some EGS believe the industry would be able to address the 1-hour SO₂ standard at the same time as they address the Cross-State Air Pollution Rule and Mercury and Air Toxics Standards.

Some EGS stated that monitoring data needs to be obtained in a timely fashion; they do not want to wait 3 years for monitoring data to be generated. In addition, some EGS stated that EPA should not require on-site meteorological data since that could delay by 3 years regulatory efforts.

**ATTENDEES FOR SO₂ NAAQS IMPLEMENTATION STAKEHOLDER MEETING
May 30, 2012 - Environmental Organizations**

| | | |
|----------|----------|-----------------------------------|
| Baron | David | Earthjustice |
| Coequyt | John | Sierra Club |
| Culligan | Kevin | Environmental Protection Agency |
| Damberg | Rich | Environmental Protection Agency |
| Davis | Emily | Natural Resources Defense Council |
| Dillen | Abigail | Earthjustice |
| Duffy | James | Clean Air Council |
| Fabish | Zachary | Sierra Club |
| Gardner | Robert | Greenpeace Consulting |
| Kelly | Leah | Environmental Integrity Project |
| Ling | Michael | Environmental Protection Agency |
| Nearhood | Jennifer | Natural Resources Defense Council |
| Nilles | Bruce | Sierra Club |
| Nolen | Janice | American Lung Assoc. |
| Page | Steve | Environmental Protection Agency |
| Pearlman | Toba | Sierra Club |
| Peress | Jonathan | Conservation Law Foundation |
| Stebbins | Joshua | Sierra Club |
| Ukeiley | Robert | Law Office of Robert Ukeiley |
| Walke | John | Natural Resources Defense Council |
| Wayland | Chet | Environmental Protection Agency |
| Warner | Mandy | Environmental Defense Fund |