



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

Air Resources Division

P.O. Box 25287

Denver, CO 80225-0287

April 29, 2013

N3615 (2350)

Lisa Tomczak
Air Quality Division, State Implementation Plan Section
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Dear Ms. Tomczak:

The National Park Service (NPS) has reviewed the March 2013 revision to the Arizona State Implementation Plan (SIP) for Regional Haze, particularly the added sections on emissions inventory and reasonable progress analyses. We did not see substantive changes to the Best Available Retrofit Technology (BART) sections and refer Arizona Department of Environmental Quality (ADEQ) to our December, 2010 BART comments to ADEQ and our September, 2012 and March, 2013 BART comments to EPA Region 9.

Comparison of 2002 and 2008 Emissions Inventories

EPA proposed partial disapproval of the Arizona Regional Haze SIP because ADEQ did not include the most recent emissions inventory as required under Section 40.51.308(d)(4)(v). ADEQ has provided the 2008 inventory developed in cooperation with the Western Regional Air Partnership (WRAP) and compared emissions trends to the 2002 baseyear inventory.

Table 8.7.1 indicates that point sources are the largest source category for sulfur dioxide (SO₂) emissions. In Section 8.7.9 please briefly describe the basis for the reductions in SO₂ and nitrogen oxide emissions from point sources between 2002 and 2008. Is this due to required emissions controls that will continue into the future, permanent facility closures, changes in electricity generation and industrial activity that are influenced by economic conditions and not permanent reductions, or other factors?

We agree that differences in methodologies make direct comparison between the two inventories difficult. Where inventory methods changed for a sector (e.g. areas sources, on-road and non-road mobile sources), differences between methods likely apply to all pollutants from the sector and not just those pollutants that are highlighted in the tables due to large percentage increases.

Reasonable Progress Demonstration

EPA proposed to disapprove Arizona's reasonable progress goals because the State did not conduct an adequate four factor analysis of potential emission controls for point and area sources. In this SIP revision, however, ADEQ did not conduct a more detailed four factor analysis, but instead provided an evaluation of the IMPROVE monitoring data to assert that visibility improvement since 2000 is sufficient to demonstrate reasonable progress. Arizona should have considered what emissions controls are reasonable in the first review period, independent of the rate of progress projected by 2018.

We agree with ADEQ that the regional haze metrics for the 20% worst and 20% best visibility days are easily influenced by non-anthropogenic events such as wildfire. Analysis of annual trends provides an additional weight of evidence, but does not replace the regional haze metrics. EPA's April 2013 guidance for periodic progress reports recommends that states consider five-year rolling averages for the 20% worst and 20% best days to reduce the influence of any single year on the overall visibility trends.

Data in Table 11.14 suggest that for the period 2006-2010, visibility on the 20% worst days is near or below the 2018 Reasonable Progress Goals at all Class I areas. However, the extrapolation of the rate of reduction between 2000 and 2010 to 2018 has not been supported. ADEQ has not demonstrated that significant additional anthropogenic controls will occur between 2010 and 2018. In Chapter 8 ADEQ did not demonstrate that observed emissions reductions from point sources were permanent reductions. For example, industrial emissions that declined during the economic recession could increase when the economy recovers. Nor has ADEQ explained how variability in emissions (e.g. fire, dust) that influenced visibility trends to 2010 were represented in the revised projections to 2018. Organic carbon and elemental carbon emissions from fire likely increased in 2011 and 2012 at several Class I areas due to large wildfires in those years. The revised 2018 projections are informative but are not conclusive.

Phoenix Cement

ADEQ has not demonstrated that Selective Non Catalytic Reduction (SNCR) controls are not reasonable for Phoenix Cement. ADEQ did not provide a \$/ton cost or \$/dv visibility benefit for SNCR. SNCR has been required for BART and RP for cement plants in other western states.

We appreciate the opportunity to work closely with Arizona DEQ to improve visibility in our Class I areas. For further information regarding our comments, please contact Pat Brewer at (303) 969-2153.

Sincerely,



Susan Johnson
Chief, Policy, Planning and Permit Review Branch

cc:

Colleen McKaughan
Associate Director, Air Division
U. S. EPA, Region 9
75 Hawthorne Street
San Francisco, California 94105