



## **TOC Attribution of Haze Project Plan February 27, 2004**

### **Overview**

As called for in the WRAP Strategic Plan, the Technical Oversight Committee has formed an Attribution of Haze Workgroup. The AoH workgroup will oversee the 2004 Attribution of Haze project. The first meeting of the AoH workgroup will be by conference call, with the first in-person meeting in late March 2004, and the effort will continue through the year. There will be staff and contractor support to prepare materials for review by the workgroup. The primary duties of workgroup members are to provide project guidance by participating in phone calls and meetings and to review and discuss analytical results, data, and summary documents.

The Attribution of Haze project will result in a report describing the emissions source categories and geographic source regions presently contributing to visibility impairment at each mandatory federal and tribal Class I area in the WRAP region. The AoH workgroup will be integrating analytical results and data from the following:

- Source apportionment modeling simulations from the Regional Modeling Center;
- Air mass back trajectory and receptor-oriented analyses of aerosol monitoring data from the Ambient Monitoring & Reporting Forum's "Causes of Haze" project;
- Existing and refined emissions inventories prepared by the various emissions-related Forums;
- Special-purpose visibility impairment attribution studies such as BRAVO, MOHAVE, et cetera;
- EPA technical guidance documents and analyses related to regional haze; and
- Journal publications and workshop/conference reports related to emissions and visibility impairment.

The AoH project report, to be finalized in January 2005, is the first of several iterative analysis steps for the WRAP, toward the 2007 regional haze plan deadline. The next step is an IOC analysis project examining what emissions are controllable, and the development of strategies to address those emissions. A second AoH project, to begin in mid-2005, would then analyze additional, more complete data and analytical results, and a final report in 2006 for SIP and TIP purposes. The primary purpose of the 2005 AoH project report is to provide air regulators an initial, detailed assessment of the geographic regions and source categories affecting the Class I areas for which they are responsible.

## **Workgroup Membership**

At the request of the TOC, the AoH workgroup will draw upon representatives from across the WRAP Forums, Workgroups, and Committees, to assure that a broad range of interests are addressed in the analyses, and that a policy-relevant report be produced. Both the §309 Implementation and the §308 Haze Implementation Plan Workgroups, sponsored by the Air Managers Committee, will be asked to review the draft report, to assist the AoH workgroup in assessing its utility for their regional haze implementation planning purposes. As is the case for all WRAP groups, the meetings and conference calls are open to any interested participants, and the data analyses and reports will be available for review and comment as they are prepared. In addition to the TOC members serving as members of the AoH workgroup, specific representatives designated by the technical and joint Forums and workgroups, the IOC, and the state and tribal caucuses are listed next:

Jeffrey Stocum (Oregon DEQ) – Emissions Forum  
Mark Fitch (Arizona DEQ) – Fire Emissions Joint Forum  
Duane Ono (Great Basin Unified AQMD) – Dust Emissions Joint Forum  
Rory MacArthur (Chevron/Texaco) – Modeling Forum  
Robert Kotchenruther (EPA Region X) – Modeling Forum  
Marc Pitchford (NOAA) – Air Quality Monitoring & Reporting Forum  
Bob Habeck (Montana DEQ) – state caucus  
Jean-Paul Huys (Nevada DEP) – state caucus  
Cara Casten (Wyoming DEQ) – state caucus  
Jason Walker (Northwestern Band of the Shoshone Nation) – Tribal Data Development Workgroup  
*? (affiliation) – Initiatives Oversight Committee*  
*? (affiliation) – tribal caucus*  
*? (affiliation) – tribal caucus*  
*? (affiliation) – tribal caucus*

## **Process and Deliverables**

The Attribution of Haze project will consist of a team of cross-disciplinary group of experts, from both within and exterior to the WRAP organization, integrating and synthesizing three major types of information – monitoring, modeling, emissions inventory – to describe the extent of the geographic and source type contributions to visibility impairment at each Class I area in the WRAP region. The project, directed by a TOC-lead workgroup, will identify the following:

- Geographic source areas of emissions that contribute to impairment at each mandatory federal Class I area (also including existing and potential tribal Class I areas);
- Mass and species distributions of emissions by source categories within each contributing geographic source area; and
- The amount of natural and manmade emissions affecting each Class I area.

The AoH Workgroup will integrate and synthesize the above data into clear explanations of the causes of impairment for each Class I area, including:

- Document the assumptions and methods used in the integrated analyses of modeling, monitoring, and emissions data;
- Assess the biases and and uncertainties in the various data; and
- Provide succinct, clear summaries suitable for policy makers, of the estimated areas and sources of impairment for each Class I area, including the extent of uncertainty about the estimates.

A contractor will be hired to coordinate the collection, compilation, and review of the data described above, including subcontracting with external expert reviewers for written reports on specific analysis topics. Specifically, the contractor will:

- Attend initial Workgroup meetings and distill members' opinions and results of discussions into a schedule and methodology to accomplish the tasks outlined above;
- Subcontract with independent experts for analytical work;
- Gather and format the resulting information and data from WRAP Forums, independent experts, and other related air quality analyses, all for review by the Workgroup;
- Draft a "Attribution of Haze Report" for review and comment by the Workgroup; and
- Complete and publish a "Final Attribution of Haze Report".

### **2004 Schedule**

January – March

- Meetings (phone and in-person) to further define the project plan, activities, and schedule
- Develop scope of work and deliverables for contractor support
- Hire contractor

April – June

- In-person meeting(s) with workgroup and contractor to review available data
- Refine workgroup schedule based on expected data availability

July – September

- In-person meeting(s) with workgroup and contractor to review available data (reports from Regional Modeling Center and Causes of Haze projects expected)
- Assign expert review topics to subcontractors
- Continue to refine workgroup schedule based on expected data availability

October – December

- In-person meeting(s) with workgroup and contractor to review all available data (closure on analyses provided by the Regional Modeling Center and Causes of Haze projects)
- Review draft reports from expert reviewers

- Review first draft of Attribution of Haze report prepared by contractor
- Identify dates for publication of external review draft and final Attribution of Haze reports

January 2005

- Publish complete final 2004 Attribution of Haze report
- Make plan for subsequent workgroup activities