Blueprint for 2000-04 Regional Haze Data Certification

IMPROVE Steering Committee Meeting

July 27, 2005

Blueprint for 2000-04 Regional Haze Data Certification – *Proposed Schedule*

- ◆ **August 2005**
  - ▪ **UCD - complete preliminary data processing**
  - ▪ **UCD/CIRA – assess and identify specific additional objective data criteria**
- ◆ **September 2005**
  - ▪ **UCD (9/1/05?) - deliver preliminary data to CIRA**
  - ▪ **UCD/DRI – suggest which specific additional objective criteria can be applied to preliminary data**
  - ▪ **CIRA - post preliminary data on IMPROVE/VIEWS for initial haze planning review**
- ◆ **October through late 2005**
  - ▪ **?Whom? – complete Class I area-by-area evaluation, and provide "final" site-by-site data to CIRA**
  - ▪ **CIRA – Post "final" 2000-04 baseline data on IMPROVE/VIEWS websites**

Blueprint for 2000-04 Regional Haze Data Certification – *Bext Reporting Method*

- ◆ **Determine Bext reporting method for "final" regulatory planning dataset by site, using additional objective criteria**
  - ▪ **Use existing IMPROVE Bext reporting method for <u>valid</u> samples**
  - ▪ **Consider modifying Regional Haze Tracking Guidance to use modified Bext reporting method for <u>uncertain</u> samples by:**
    - ◆ **Reporting PM10 soil Bext, not FS and CM separately**
    - ◆ **Determining whether EC and OC can be reported separately, or as TC**
    - ◆ **Addressing NH4NO3 vs. Calcium and Sodium NO3**
- ◆ **Objectives of this exercise**
  - ▪ **Better?! than substituting other "average" monitored values**
  - ▪ **Final QA check for setting baseline value at each site**
  - ▪ **Recognize limits of what is "known" about visibility effects of measured mass for regional haze plans, especially for fire and dust impacts**
  - ▪ **Does not remove any data from IMPROVE database, but qualifies the data for use in first round of regional haze plans**

Blueprint for 2000-04 Regional Haze Data Certification – *Ideas for Additional Objective Data Criteria*

◆ **Flow rate criteria**

- ■ **Apply by sample period and by module from which IMPROVE Bext species are derived (SO4, NO3, EC, OC, FS, CM)**

- ■ **Difference from design flow rate at actual atmospheric conditions from sample period is data quality metric**

- ■ **Sample flow rate within $\pm$10%?!? = <u>valid data</u>, accept reporting of standard IMPROVE species Bext**

- ■ **Sample flow rate more than $\pm$10 up to $\pm$20%?!? = <u>uncertain data</u>, action is to move to modified Bext reporting method (previous slide)**

- ■ **Flow rate more than 20%?!? = sample data from that channel <u>invalid</u>, action is determine if modified Bext reporting method is appropriate or applicable**

Blueprint for 2000-04 Regional Haze Data Certification – *Ideas for Additional Objective Data Criteria, cont.*

◆ **Laboratory analysis criteria - after applying flow rate criteria by sample period and by module from which IMPROVE Bext species are derived (SO4, NO3, EC, OC, FS, CM), then assess:**

- ■ **Module C OCp issue – analysis and recommendation for criteria for valid/invalid (if needed) and when to go to modified Total Carbon Bext method (previous slide)**

- ■ **Module A/B composition match issue[s] – analysis by monitor site (address SO4 & NO3 Bext method case-by-case)**

- ■ **Module A/D mass sampling issue – (only at masked sites? and/or poor flow control?) – use flow rate criteria (previous slide) to determine appropriate Bext reporting method (PM10 Bext or FS/CM Bext values)**

- ■ **Other QA issues as noted by Nicole/Chuck/Warren/Ann (keep Titanium in fine soil Bext equation? etc.) – address site-by-site**