

# **Four Corners Air Quality Task Force Work Group Conference Call Notes**

## **Monitoring Work Group; Conference Call; 01/16/07**

### **Participants**

Mary Lou Asbury, LWV / Cortez / Montezuma; Sylvia Oliva, Mesa Verde National Park; Koren Nydick, Mountain Studies Institute; Theodore Mueller, Ret. Professor Adams State University – Aztec; Eric Janes, Retired Federal Employee, USDI; Gordon Pierce, Air Pollution Control Division, Colorado Dept. of Public Health and Environment; Terry Hertel, New Mexico Environment Department, Air Quality Bureau

### **Items of Discussion**

#### **Monitoring Matrix**

The evolving matrix was discussed. It has once again been revised. The latest revision included additional columns for program jurisdiction of each site, AQS code or other program code, address, latitude, and longitude.

A question came up regarding how detailed an “address” should be. Consensus was that in the case of towns or cities, a detailed address should be used, while “addresses” for more remote sites would just have “county, state” information.

It was suggested that a column for “site number” be included, and that an accompanying map be used having numbers on it to denote each site’s location.

Koren mentioned that two more sites should be included; Durango Mountain Resort and Red Mountain Pass. Ted originally had the Durango Mountain Resort included in the matrix, but Terry has had no response to his inquiries for information; thus no information. Hopefully Koren’s contacts will be more helpful so that these sites will be included. Gordon mentioned that he already had a call into someone for Durango Mountain Resort data.

Sylvia suggested that there should be contact information and a link reference for each site program. Terry stated that these could be put into the narrative, since it already refers to each site program.

There was more discussion as to referencing the power plants in the narrative.

#### **Wind Roses**

We discussed Gordon’s five-slide Power Point document. It showed a map of the area and the location of the sites that he used for the wind roses. It also had slides of wind roses for 2005 annual, 2005 day time, 2005 night time, and 2005 summer afternoon.

Gordon wanted to know how far out to go for inclusion of sites. As it is now, the present inclusion of the Canyonlands site requires a large map. It was agreed that a smaller map (in terms of area) would be better. It was also agreed that some pragmatism be used in generating these wind / pollution rose maps; weighing inclusion of distant sites against having a “readable” product.

Gordon stated that although it would be good to use only sites with 10-meter met towers (to avoid ground effect), in some cases he might need to use data from some RAWS sites to “fill in gaps”.

Sylvia suggested that it would be helpful to know location all of the sites. Gordon stated that he could produce a map of all of the sites which could be used by others later if needed.

Gordon stated that he will now begin work on pollution roses.

Ted had a question as to what the “rays” on the pollution roses would represent, and Gordon replied that they would show “percent of time” from a particular direction coupled with pollutant concentration. Ted had asked so that he could put together a description of the pollution roses for a layperson’s benefit.

There was some discussion of the Power Point last slide (summer afternoon); how the predominant direction was westerly, and how it would be interesting to see the pollution roses for this time period.

The roses were produced using WR Plot software. The colored roses were more favorable than “B&W” ones.

Ted suggested that roses plus topography would be nice. Gordon stated that he could possibly generate two products; one having roses and a map and one with roses and topography. Gordon may need some GIS data from other states, and Terry stated that he would check into New Mexico GIS data that AQB might have.

### **Sylvia’s Comments**

The first issue that we addressed was Sylvia’s “non-compliant” brown cloud along highway 491; the presence and movement of seeming to contradict the wind roses for Mesa Verde and other sites in the area. Gordon and others speculated that its genesis is evidently “long range sources” such as Los Angeles, Salt Lake City, and Las Vegas (NV). The fact that nothing can be done about such long range sources just puts more of an emphasis on local sources.

This discussion prompted questions regarding the extent of contributing pollution from the CBM and oil development in the area. Ted referred to the emissions inventory that the Oil & Gas group has and Gordon was curious as to whether this would have historic versus current data.

Sylvia noted the locality of the brown cloud and suggested that monitors should be on tribal land. Gordon replied that this aspect would be one of our group's recommendations.

Ted asked about the possibility of any satellite imagery that might show these "brown cloud" events and shed some light on air mass movement characteristics in the area. Gordon mentioned some likely sources and Terry offered to look into them.

### **General Discussion**

It was observed that, while the group is presently focused on "data-driven" recommendations for monitoring sites, there are also the "non-data-driven" (anecdotal as Koren put it) types of recommendations to consider. Public concerns such as health concerns fit in this category.

A "roadmap" to recommendations was suggested.

The group discussed Koren's recommendations for mercury, nitrogen, and sulfur monitoring.

Gordon stated that there should also be a focus on mercury in area water bodies.

Sylvia touched on Mesa Verde mercury deposition data for the first three quarters of 2006.

### **Action Items**

Revised Matrix and Draft of Narrative – February Meeting  
Pollution Rose / Map Overlay – February Meeting

### **Next Call**

Next call will be February 20th at 2:00 PM.

### **Adjourn**

Call was ended at 3:27 PM.