

DUST EMISSIONS JOINT FORUM CONFERENCE-CALL MINUTES

February 10, 2004

Attendees:

Lee Alter
Don Arkell
Cathy Arther
Ed Barry
Beverly Chenausky
Gail Cooke
Robert Farber
Bruce Friedl
Lee Gribovicz
Susan Hardy
Jean-Paul Huys
Roger Isom
Wayne Leipold
Carrie MacDougall
Duane Ono
Marc Pitchford
Toni Richards
Barbara Trost
Mary Woods

Absentees:

Ken Hamilton
Mel Joseph
Tom Pace
Bruce Polkowsky
Bruce White

Carrie MacDougall informed the members/participants that Susan Hardy, with Mountainland Association of Government in Utah, is now a member of the Dust Emission Joint Forum.

The next Dust Emissions Joint Forum meeting will be held on February 24th at 9:00 a.m. and February 25th at 8:00 a.m. in Las Vegas at the Desert Research Institute.

Carrie and Duane gave a report on the Technical Summit and Regional Modeling meetings held in Tempe, AZ, January 26-28. Duane Ono stated that the joint project with Regional Air Quality Modeling and the Dust Forum is progressing. Duane suggested members/participants look at the Air Quality Modeling site for the Regional Modeling Center (RMC), which has the TOC Forum status report for February 2004, and information on air quality modeling. The modeling results included an evaluation of how well the model performed using emission estimates for wind blown dust as well as other fugitive dust sources.

<http://www.wrapair.org/forums/toc/meetings/040126techsummit/index.html>

Carrie continued with the TOC update informing members/participants that various Forum Co-chairs had given presentations on ongoing projects/activities. The RMC is applying the fugitive dust algorithm. The Dust Forum has a list of activities they would like to see the RMC accomplish in association with this Fugitive Dust Project. They also presented an analysis of the MM5 data and how well the met-data corresponded with the meteorological monitoring sites. Most of the discrepancies are associated with wind direction and wind speed, which will impact any algorithm when predicting fugitive dust emissions. The Attribution of Haze project is moving forward, two members on the Dust Forum, Duane Ono and Jean Paul Huys are heading up that project. The Emissions Data Management System (EDMS) is the most extensive project thus far. The Emissions Forum and the Fire Forum are progressing with the National Fire Technical Workshop. Members/participant will be informed of the specific dates of that workshop. There was a report given on Inter-RPO activities and topics, with potential for a joint project development. Members/participants were reminded of the WRAP Board Meeting scheduled for April 6th and 7th.

The members/participants were informed that the Modeling Forum has a summary of the modeling of the fugitive dust results on the WRAP website. The information can be accessed by going to the WRAP website and then to the Modeling Forum and then using the link to the Fugitive Modeling Centers Website. The Forum agreed that there should be a discussion at the Las Vegas meeting, about the air quality modeling results.
http://www.wrapair.org/forums/toc/meetings/040126techsummit/modeling_workshop/correctedBase_MPE_summary.pdf

A member suggested the Forum invite someone from the Regional Modeling Center to give a presentation on the model and fugitive dust performance. If they are unable to attend they could email a slide presentation and discuss the information over the phone.

A member asked if there is going to be a dust emissions evaluation that checks predicted winds against the measured winds in corresponding periods and places, and looks at the dust concentration to see if it corresponds to the expectation of wind blown dust in certain areas. The individual was informed that, that was being addressed on one of the proposed projects.

The Forum discussed the proposed projects/status update:

Examine the 20% Worst Visibility Days for Dust Impacts (Marc Pitchford) -

Marc Pitchford suggested that they begin the project by looking at individual events and try to determine if they are wind disturbed local or wind disturbed at a distance. Susan Hardy inquired about the significance of any other dust that is not wind blown compared to the wind blown dust. She was informed that that kind of study had not been done yet, but possibly could be done by using emissions and air quality modeling or some sort of episode analysis. The Forum agreed that Marc Pitchford would put together a list of things that the Causes of Haze Group could look at and corresponding cost/time analysis to determine where the Forum will go in terms of addressing the issue.

Fugitive Dust Handbook and Website Resource –

The discussion was postponed until the end of the meeting due to potential RFP bidders included on this conference call.

Improve the Estimates of the Fine Fraction of Dust Emission Factors (Duane Ono/Roger Isom) –

Duane has been talking with Chat Cowherd about a project for re-evaluating the PM-2.5 fraction for fugitive dust used in AP-42. There is reason to believe that the assumed fraction for PM-2.5 may be too high because of possible problems with the original test method. The Forum agreed to defer the rest of the discussion to the end of the meeting due to potential bidders being included on this conference call.

Establish a Common Definition of Dust and Dust Emission Types (Rob Farber) –

Carrie and Rob gave an overview of the WRAP Dust Emissions Joint Forum Survey. It has a Draft definition of fugitive dust and a categorization of dust emission sources, which is divided into four different types: anthropogenic and reasonably controllable; anthropogenic and largely controllable; natural and reasonably controllable and natural and largely uncontrollable. Rob asked that everyone review the survey and provide additional comments/suggestions. The Forum agreed to have all the comments to Rob by February 20th, so that he can compile them. Elonda will email the information to the Forum on February 23rd.

Carrie suggested Rob talk with Alvin Chun, moderator at EPA Region 9, to help with future discussions on the common definition of dust. Lee Alter suggested the Forum finalize the survey and let the moderator review it to ensure the Forum is on the right path.

Susan Hardy asked if the Forum will review the studies/results of the National Cooperative Highway Research Program to ensure that all pertinent information is included in the Fugitive Dust Handbook. Susan suggested she give a presentation regarding this issue on February 24th, and the Forum agreed.

Duane suggested that the Tuesday conference calls be held each first or third Tuesday of the month at 10:00 a.m. Pacific Time. The Forum was in agreement, but would consult Carrie MacDougall to see which would work best for everyone. Update: Regular Dust Forum conference calls will be held on the 4th Tuesday of each month at 10 am Pacific.

Refine Wind Blown Dust Inventory -

Discussions by Michael Uhl, Carrie MacDougall, Duane Ono, and Don Arkel at the Tempe conference were summarized. The summary entailed the tasks to be accomplished in Phase-Two of the Fugitive Dust Project. Focus was to be given to tasks geared toward global adjustments to the methodology and modeling, which would entail regeneration of the PM₁₀ and PM_{2.5} emission inventories at a 12km resolution. Once the Phase-Two adjustments are applied, an assessment of the next steps will occur, based on recommendations from Phase-One. The following individuals volunteered to review the scope of work on the project: Lee Gribovicz, Duane Ono, Carrie MacDougall, Gail Cooke, Mike Uhl and Tom Moore. The comments will be compiled and forwarded to the Forum February 20th.

The Forum agreed on the following items for the February 24th agenda:

- Modeling Results for Fugitive Dust, including Windblown Dust (Regional Modeling Center)
- Refine Wind Blown Dust Inventory (Michael Uhl)
- Transportation Conformity PM-related Issues (Susan Hardy)
- Fugitive Dust Handbook and Website Resource (Duane Ono)
- Improve the Estimates of the Fine Fraction of Dust Emission Factors (Duane Ono)
- 20% Worst Visibility Days for Dust Impacts (Marc Pitchford)
- Establish a Common Definition of Anthropogenic vs. Natural sources (Rob Farber)
- Satellite Images and GIS Mapping (Rob Farber)

Potential bidders for the Fugitive Dust Handbook were asked to disconnect from the conference call so that forum members could discuss the RFP for the handbook.