

WRAP Dust Emission Joint Forum Conference Call
March 23, 2004

Notes courtesy of Lee Gribovicz.

Participants included:

Duane Ono	Tom Pace	Roger Isom	Earl Withycombe
Lee Gribovicz	Joe Gibbs	Toni Richards	Gerry Mansell
Lee Alter	Gail Cooke	Kermit Snow	Richard Countess
Bruce Friedl	Bev Chenausky	Mel Joseph	Kathy Messerschmitt
Wayne Leipold	Kathy Arthur	Rob Farber	
Ken Hamilton	Mary Cho	Marc Pitchford	

Call Details

★ Co-Chair Resignation ★

Duane Ono relayed that Carrie MacDougall was resigning as a Co-Chair of the DEJF due to increasing Clark County workload and reorganization. Clark County is to be designated non-attainment for ozone, and Carrie determined that this SIP development, along with other environmental management responsibilities, would preclude her having meaningful effort to the Dust Forum. Duane asked if any phone participants were interested, but no names came up. Lee Gribovicz noted that he and the WRAP staff would be searching for possible candidates from among WRAP contacts.

★ Las Vegas Dust Emission Joint Forum Meeting ★

The DEJF held a meeting in Las Vegas February 24-25th. Duane noted that the meeting minutes were out on the DEJF web site, along with the PowerPoint presentations made during the meeting.

★ Next Meeting ★

At the Las Vegas meeting, the Forum representatives discussed setting the next DEJF meeting for late July near Pullman, Washington. Candis Claiborne, at the University of Washington is active in wind tunnel studies and it was suggested that it might be good for Forum members to observe some of this wind tunnel testing. Dates were tentatively set for July 27-29th, but Duane wanted to look at how the Forum chooses to proceed with the Fugitive Dust Modeling before making a final commitment to this location.

★ DEJF Projects: 20% Worst Days Analysis ★

Lee Alter sent out a proposal from Vic Etyemezian at DRI on March 16th, which proposes to "develop and document a methodology for assigning worst dust days at IMPROVE monitors within the WRAP domain to a set of source classes" and to "use the methodology to categorize worst dust days in the WRAP domain over the period 2001-02". Worst dust days from 2003 will also be included in the analysis as 2003 monitoring data are made available. Lee Alter noted that the project schedule will call for reporting on the first two years by the end of 2004, with 2003 analysis completed as time permits. This project will be incorporated as a \$50K amendment to the existing DRI contract. A committee of

Bruce Friedl, Rob Farber, Duane Ono, Marc Pitchford and John-Paul Huys, will be coordinated by Lee Alter to oversee this project.

★ DEJF Projects: Dust Handbook Project ★

The Review Team of Wayne Leipold, Ed Berry, Lee Alter, Carrie MacDougall & Duane Ono interviewed 6 bidders after the Las Vegas Meeting, and this date Duane reported that they had selected Countess Environmental (working with Midwest Research's Chat Cowherd) as the contractor for the project. Richard Countess explained that the first task was to put together a workplan by April, then they planned to come to Bishop, California to review the plan with Duane and the team. Draft documents will be prepared in June & July, and the schedule calls for the project to go on the web in the Fall of '04.

★ DEJF Projects: Improved PM_{2.5} Fraction Estimates ★

Regarding the evaluation of the PM_{2.5} fine fraction of dust, Duane noted that he has been talking with Bruce White of UC-Davis) & Chat Cowherd to evaluate the potential methods of evaluating PM monitoring to determine what bias is present in current sampling results. A proposal has yet to be prepared for this project, but this date participants held extensive discussion on possible analytical methods to be used in this analysis. Richard Countess suggested that we consider doing a chemical analysis of the PM_{2.5} and PM-10 samples. Mike Kleiman at UC Davis can do the chemical analysis. Marc Pitchford noted that a chemical analysis of the coarse filters was being done on some of the IMPROVE filter samples. It might be good to compare the chemical fingerprints if it's done.

The workgroup was established for this project consists of Rob Farber, Barbara Trost, Bruce Friedl, Gail Cook, Duane Ono, Roger Isom, & Don Arkell. This date Kathy Messerschmitt, the Tribal Caucus Coordinator for NTEC, also volunteered to work on this subcommittee.

★ DEJF Projects: Natural vs. Anthropogenic Definition ★

After input from Forum members at the Las Vegas meeting, Rob Farber and Lee Alter worked to put together a March 15th document defining Dust as "Particulate matter that is or can be suspended into the atmosphere as a result of mechanical, explosive, or wind-blown suspension of geologic, organic, synthetic, or dissolved solids. Dust does not include non-geologic particulate matter emitted directly by internal and external combustion processes". Fugitive dust was defined as "Dust that does not enter the atmosphere through a vent, duct, stack, or tailpipe". The table with examples of "Anthropogenic" and "Natural" dust is displayed on the following page:

Anthropogenic Dust	Natural Dust
<p>All mechanically- and explosively-suspended solids and dissolved solids from activities including but not limited to:</p> <ol style="list-style-type: none"> 1. Construction, mining, and demolition 2. Material handling, processing, and transport 3. Agricultural tilling, irrigation, and crop treatment 4. Vehicular movement on paved and unpaved surfaces 5. Animal movement on surfaces disturbed or altered by humans beyond a natural range for recreational or mass production, consumption, or transportation purposes (confined animal feeding operations, herding on over-grazed lands, etc.) 	<ol style="list-style-type: none"> 1. Animal movement on lands not disturbed or altered by humans beyond a natural range for recreational or mass production, consumption, or transportation purposes 2. Natural landslides, rockslides, and avalanches 3. All solids and dissolved solids emitted by volcanoes, geysers, waterfalls, rapids, and other types of splashing 4. All extraterrestrial material and impacts
<p>The amount of solids and dissolved solids entrained by wind passing over surfaces disturbed or altered by humans beyond a natural range for recreational or mass production, consumption, or transportation purposes <u>in excess</u> of what would be entrained without such disturbance or alteration. Such surfaces may include, but are not limited to:</p> <ol style="list-style-type: none"> 1. All natural lands (disturbed sand dunes, lake beds, etc.) 2. Construction and mining sites 3. Material storage piles, landfills, and vacant lots 4. Roadways and parking lots 5. Artificially-exposed beds of natural lakes and rivers 6. Artificial water bodies 7. Agricultural crop, range, and forest lands 8. Areas burned by anthropogenic fires (as defined by the WRAP Policy for Categorizing Fire Emissions) which have yet to be revegetated or stabilized 	<p>All solids and dissolved solids entrained by wind passing over surfaces <u>not</u> disturbed or altered by humans beyond a natural range for recreational or mass production, consumption, or transportation purposes. Such surfaces may include, but are not limited to:</p> <ol style="list-style-type: none"> 1. Naturally-dry river and lake beds 2. Barren lands 3. Exposed rock 4. Sand dunes 5. Natural water bodies (e.g., sea and lake spray) 6. Non-agricultural grass, range, and forest lands 7. Agricultural crop, range, and forest lands 8. Areas burned by natural fires (as defined by the WRAP Policy for Categorizing Fire Emissions) which have yet to be revegetated or stabilized
<p>Wind-blown particulate matter from sources created by natural events over two years ago, similar to EPA's natural events policy</p>	

Rob has reviewed a few responses to this proposal, but it was also been sent to the §308/§309 Implementation Workgroup of the Air Managers Committee. Lee Alter noted that they are meeting today & tomorrow, and he wanted to see the comments of these SIP planners before moving the project forward. It was decided that comments will be due by April 2nd, at which time Lee Alter and Rob Farber will prepare a revision for circulation to the DEJF membership. Once the DEJF passes on the document, it will then go to both the IOC and the TOC for review.

★ DEJF Projects: Windblown Dust Model ★

The Phase I Report on this project was finalized March 12th, and is currently available on the DEJF website. Phase 2 refinements were discussed at the Las Vegas meeting, and Tom Moore will take the lead on revision of this model. Duane asked for participants to form a subcommittee to work on the Phase 2 Scope of Work, and Lee Gribovicz, Tom Pace and Duane Ono volunteered.

Marc Pitchford noted that he had been reviewing global dust models recently, and the question was raised in his mind as to whether we have looked at what others have done in the development of this model. Lee Gribovicz agreed that the DEJF probably should look at other methodologies for modeling dust in the Forum's future workplans, but he pointed out that there's a practical aspect of this project to consider. Lee explained that this methodology was selected by the Emission Forum several years ago to provide a fugitive dust inventory for the §309 RH modeling. When that proved impossible to complete on time, it was concluded that we absolutely had to have this fugitive dust inventory for the §308 modeling, and the SIP schedule requires the inventory by the end of 2004.

Tom Pace noted that WRAP Dust Expert Panel had looked at alternative options. Although they did like the "Draxler" approach, they had given formal blessing for the Emission Forum to pursue this Wind Tunnel alternative. Lee noted that should the DEJF decide they wanted to move forward with another methodology, they had to "get cracking" so that a realistic inventory was available by the end of this year.

Duane Ono explained that he was not advocating trashing the Wind Tunnel Model in favor of starting all over, but he was leaning toward somehow using ambient monitoring data to calibrate the modeled emissions.

Richard Countess noted that there were no tables of wind tunnel emission factors in the Environ report, and he felt that such information ought to have been included. Gerry Mansell explained that a couple of technical memos had been produced, that contained information of this type, and Lee Gribovicz agreed to forward that information to Mr. Countess for his review. However, this report has been out for comment for several months, and Lee pointed out that it was too late to do anything further with the Phase I report. Mr. Countess' participation in the Phase II development was suggested and he accepted that invitation.

★ Next Call ★

The DEJF calls are to be held on the fourth Tuesday of each month, with next call falling on April 27th at 11:00 AM, Mountain Time.

Who's on the Call? - Rob Farber didn't know who was on the call when they were talking. Duane will send a list of the potential participants with the next agenda so people can check off who else is on the line during the roll call. On the call we will also ask people to identify themselves when they speak.

