

MEMORANDUM

TO: Dan Olson, Air Quality Administrator  
FROM: Lee Gribovicz, WRAP TOC Co-Chair  
SUBJECT: WRAP Dust Emission Joint Forum: Definition of Dust Project Status  
DATE: August 13, 2004

On August 13, 2004, I participated in WRAP DEJF conference call, set up primarily to discuss the status of the "Definition of Dust" project for the Forum.

Participants included:

Mike Edwards	Wayne Leipold	Ken Hamilton	Don Arkell
Lee Gribovicz	Marc Pitchford	Jeff Stocum	Vic Etyemezian
Lee Alter	Bruce Friedl	Bob Gruenig	

Call Details

**★ General Project Updates ★**

✦ PM<sub>2.5</sub> Fine Fraction Analysis ✦

Lee Alter has received the technical proposal on this project from Midwest Research Institute, but is waiting for the budget and the sampling protocol before sending all three all at once.

✦ Causes of Dust ✦

Vic Etyemezian is leading a call this afternoon to discuss the methodology of how to relate wind speeds at local met monitors to the IMPROVE samples, in order to determine whether dust is local or more regionally generated.

✦ Dust Handbook ✦

The Contractor had a call with the Handbook Workgroup August 11<sup>th</sup>, verifying that Forum members were comfortable with data that will be inserted into the handbook chapters. They plan to have an outline on the website in the next few days.

✦ Windblown Dust ✦

There is a Windblown Dust call scheduled for August 24<sup>th</sup>, but that is also the date for the regular DEJF Monthly call. Therefore the will combine the Windblown Dust call with the normal call at 11:00 AM Mountain.

✦ DEJF Workplan ✦

Appendix I contains a copy the DEJF Workplan as revised in Reno. The Forum will work within the current budget to implement the Dust Template Pilot Project, and Gail Cooke of New Mexico is currently writing a SOW for the effort. I wanted to see the revised budget, with the proposed funding for all 2005 DEJF projects, and Lee Alter agreed to send out the revised budget table.

✦ Next Meeting ✦

The next meeting will be either the week of November 8<sup>th</sup> or 15<sup>th</sup>, coordinated with the AoH meeting. This will not be during the WRAP Board Meeting week, as Communications & the Tribal Caucus are usually busy "piggy backing" on to that session.

★ Definition of Dust ★

Lee Alter had sent out a revised "Definition of Dust" (Appendix II). He also sent out a sheet listing comments and the changes he had made in the draft in regard to those comments (Appendix III).

Marc Pitchford also sent in comments (Appendix IV), and we then went over his comments.

Regarding the "Mechanical" portion of the definition table, there was discussion on "animal movement", and how that works in to the natural/anthropogenic split. Ken Hamilton noted that "European Man" has simply replaced one type of ungulate with another, and there is some "natural" component to livestock moving on areas not disturbed.

But Marc Pitchford noted that for windblown dust, undisturbed makes a lot of sense because of the crusting that occurs on undisturbed surfaces. But for animal movement, he didn't see that the amount of dust is affected so much by the level of disturbance, but rather simply by the "numbers" of animals (including man) that are moving on that land. There was some discussion that we need to establish some "threshold" of animals that were present historically, and take "credit" for that. There was agreement that there are more factors involved such as rainfall or drought conditions, soil types and vegetative cover.

Lee Gribovicz pointed out that this whole discussion points to the fact that there aren't "absolute" arguments regarding these matters, and it reinforces the fact that the policy will be more based on a "weight of opinion" than on some absolute factual basis. And we're going to need to hold similar meeting to the Fire Seminars, to gain input from the WRAP stakeholders.

Don Arkell suggested that some components of dust are relatively insignificant with regard to Regional Haze impact (such as animal movement), and we need to focus on those components that will have a measurable impact.

Basically, the group agreed that the phrase "beyond a natural range" was very confusing terminology, and needed some additional work to improve understanding of exactly what that means.

Lee Alter pointed out that anything that we determine has to be practical within the capability Regional Haze assessment tools.

And Marc emphasized that he is trying to incorporate the concept of numbers in the animal determination. It was decided to put this in a "parking lot", as one of the issues that must be resolved. And Marc volunteered to attempt to come up with some language to capture the concepts of this discussion.

Regarding "Windblown" portion of the definition table, once again Marc was concerned about the phrase "beyond a natural range". He agreed that disturbance was a factor in the amount of Windblown dust, much more so than in mechanically generated dust.

And regarding "Natural Lands" for "Anthropogenic Emissions", he had a concern that the better term would be "undeveloped", so as to avoid the confusion of the Natural-Anthropogenic juxtaposition in this section of the table. There was no opposition expressed to this change on the call.

And the Definition Table contains the concept that dusty material which stays in place for two years, then it becomes anthropogenic, even if it was natural to begin with. There was general agreement that this concept is no longer useful, as we are now considering mechanically generated dust sources.

After we concluded discussion of Marc's comments, I noted that there seems to be a contradiction in the "Natural" column of the table, on the "Windblown" row. We give examples of surfaces that have "not been disturbed ... by humans", which includes "non-agricultural grass, range and forest lands". But then we follow that up with "agricultural grass, range and forest lands". It was concluded that this latter case probably had more to do with mechanical generation of dust, rather than wind erosion, and should be eliminated.

#### NEXT STEPS:

It was generally agreed that whatever definition we settle on first has to have consensus within the FEJF group. Then we need to obtain consensus within the WRAP stakeholder community, and we need to plan some sort of meeting(s) or seminar(s) to bring these concepts to the that stakeholder community. Then the product will be taken to the Oversight Committees, and eventually to the Board for approval as WRAP policy.

Lee Alter will go through the WRAP EI, and prepare an analysis which gives the tonnage of dust emissions by source category. This will allow the Forum to concentrate on those sources of dust that are actually significant.

And it was determined that it would be prudent to spend some of the budgeted funds for this product to define quantitatively:

- What is the "natural range"?
- Where are the disturbed areas?
- What are the emissions?

Lee Alter and Rob Farber will work together to draft a Scope of Work for contractor support to make this analysis.

APPENDIX I

Dust Emission Joint Forum August 13, 2004 Conference Call

July 30, 2004 Final Draft 2005 DEJF Workplan

APPENDIX II

Dust Emission Joint Forum August 13, 2004 Conference Call

August 11, 2004 Draft Definition of Dust

### APPENDIX III

Dust Emission Joint Forum August 13, 2004 Conference Call

Table of Comments on Previous Version: Definition of Dust

APPENDIX IV

Dust Emission Joint Forum August 13, 2004 Conference Call

Marc Pitchford August 13, 2004 Comments: Definition of Dust