

December 21, 1999

MEMORANDUM

TO: Pete Lahm

FROM: Natural Background Determination Working Group Summary from
the December Spokane, Washington meeting

The group was unwilling to identify one appropriate definition of "natural background" and it was agreed that no methodology for assessing natural background could be decided upon until such a definition was chosen. Many definitions are possible and each presents different but potentially significant consequences to one or more stakeholder groups. For this reason, the group decided that additional input regarding the issues surrounding this task is needed and should be obtained through a stakeholder-wide workshop that includes the participation of relevant policy decision-makers. The group decided that such workshop is the best use of the monies budgeted for the task, and that these dollars should either be utilized to fund speaker and/or participant travel and/or to hire a meeting facilitator or facilitators. Bill will be checking with facilitators used by the FWS for their availability and fee estimates. The group discussed that such a meeting might occur in early or mid-May so as to allow for adequate preparation time and to avoid summer fire season while not unnecessarily delaying progress toward the identified goal.

The following issues arose during the group's discussion. These concepts will be formulated into an agenda for the May workshop. The group will draft a formal agenda by the end of January.

1) How should "natural" be defined?

- What time frame should be applied in choosing a definition (i.e. prehistoric 10,000 years ago, prior to European settlement - 200 - 500 years ago, prior to fire suppression - 1900 - 1910, or current potential fire emissions excluding lands that have been modified by urban or agricultural development)?

- Bill Leenhouts offered overhead slides of concepts included in a paper he co-authored for EPA. It was evident that particular time frames over which to calculate total fire emissions will dramatically alter the scale of what is deemed "natural background." The estimates provided by Bill showed very high total fire emissions in the U.S. several hundred years ago when compared with estimates for today.

2) Emissions from sources other than fire have increased, however, offsetting the reduction in particulate emissions from fire as the country has been industrialized. The group then discussed the ecological merits and political impacts of setting "natural background" at the higher levels of pre-European settlement. For example, did the use of fire by Native Americans modify the ecology of the West? Would the differential between the baseline emissions and current emissions from prescribed burning allow for increases in prescribed burning or have industrial sources already claimed the difference? Should industrial sources even be considered in completing this task?

3) The group discussed whether a definition of "natural background" should include some provision for constituents beyond particulate matter. For example, sulfates were probably minor contributors to visibility impairment prior to the industrialization of the West. Should "natural conditions" be defined in terms of "natural" sulfate concentrations?

4) It was unclear whether the recommendation provided by the group might, if adopted by the WRAP, ultimately be applied by EPA more broadly than to just visibility. With that in mind, should, for example, the definition of "natural background" be narrowed by the group to only reference prescribed fire as it relates to visibility in Class I areas or should the group derive a definition that could be reasonably applied to all prescribed fire visibility impacts?

5) Should seasonal concerns be integrated into the chosen definition? Fires naturally occur during certain seasons throughout the West (i.e. July and August in the Northern Rockies and Pacific Northwest). If prescribed fire is considered part of the natural background only during these seasons what is the impact on fire management strategies that move fire to other seasons? How does seasonality mesh with the requirement of the regional haze rule to prohibit degradation of the cleanest 20% of the days?

6) Should the group integrate concepts relating to emissions trading into a methodology? Does inclusion of this concept affect how to best choose a definition of "natural background"? For example, the reduction in fire emissions over the past 200 years could be traded for future increases in fire emissions to improve forest health or for current or future emissions from other sources such as industry or mobile sources.