Attachment A
Scope of Work

Dust Evaluation Pilot Project
for Class I Areas in the WRAP Region

Deliverable: A report identifying PM_{10} and $PM_{2.5}$ dust sources, mitigation options, and their potential costs and benefits for a Class I area(s) in New Mexico.

Purpose: To test and demonstrate how various WRAP technical and policy products can be integrated to address the contribution of dust to regional haze at Class I areas in the WRAP region. Strengths and weaknesses of the WRAP products will be identified so that they may be improved before state and tribal implementation plans are finalized. Results will be shared with other WRAP members to inform their planning and assessment processes.

The area(s) selected in New Mexico for the pilot project will have many of its 20% worst visibility days dominated by dust and will be representative of other dust-impacted Class I areas in the Southwest. The WRAP products to be used in the study will include the following:

- Analysis of Ambient Data – The Desert Research Institute is currently under contract with the WRAP to identify the types, frequencies, and magnitudes of dust events across the WRAP region for the period 2001-2003. Further work to identify the precise sources and causes of dust for a specific subset of Class areas is planned for 2005.

- Fugitive Dust Emissions from Wind Erosion – ENVIRON and the University of California at Riverside are currently under contract to develop a 2002 windblown dust emissions inventory for the WRAP modeling domain at a 12 km resolution. A methodology and program code will be available for use at a smaller scale and may be improved using local, more up-to-date and accurate input data, if available.

- Fugitive Dust Handbook – Countess Environmental and Midwest Research Institute are currently under contract to develop a fugitive dust handbook. The handbook will contain information for several specific dust sources, such as paved and unpaved roads, construction activities, and agricultural tilling and wind erosion. For each type of source, the handbook will provide comprehensive emission estimation methodologies; sample calculations; an emission calculator/spreadsheet; control options, efficiencies, and costs; and compliance tools.

- Dust Definition and Categorization Policy – A definition of fugitive dust, including the distinction between anthropogenic and natural sources, was drafted

by the WRAP in 2004. A contractor is currently performing a feasibility analysis of the use of the draft definition of dust for the purposes outlined by WRAP.

- Attribution of Haze – The WRAP is currently using a combination of photochemical-dispersion modeling, ambient data analysis, and published research to characterize the causes of haze at each Class I area (from dust, wildfire, mobile sources, international transport, etc).

The pilot study will include close collaboration between WRAP contractors, WRAP support staff, the New Mexico Environment Department Air Quality Bureau, and the U.S. Environmental Protection Agency. This level of cooperation will help ensure that the WRAP's technical and policy products relating to dust are made as useful as possible to its members. It will also promote consensus regarding how dust sources can be adequately evaluated and addressed within a regional haze implementation plan.

The duration of the study would be nine months. The study would include the development of a general emissions inventory of all sources associated with dust-related haze within the selected Class I area. Development of the inventory may require subcontractor assistance, in which case up to $20,000 is available in the WRAP Dust Emission Joint Forum budget to support this work, which would be in addition to the $60,000 contracted to the NM Environment Department. The NM Air Quality Bureau would be willing to act as project manager to ensure completion of the project in a timely and cost effective manner. The NM Air Quality Bureau would use the emission inventory and the tools provided by the WRAP to develop a SIP-quality analysis for dust-related haze in Class I areas.

Attachment B and C
Schedule and Budget

Dust Evaluation Pilot Project
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Task	Description	Completion from Start Date	Cost
1	Develop work plan, evaluate NM class I areas using AoH results, develop dust emission inventory for sources likely affecting the chosen Class I area(s), and to the extent necessary select and oversee subcontractor to support this work. (Subcontract funds to be provided separately by WGA.)	5 Months	$15,000
2	Develop State Implementation Plan (SIP) template for pilot study.	5 Months	$15,000
3	Utilize WRAP tools for the chosen Class I area(s). Incorporate data and planning information into SIP template.	8 Months	$10,000
4	Evaluate WRAP tools used for pilot SIP.	9 Months	$10,000
5	Prepare and submit report to WRAP and communicate results to other WRAP members.	10 Months	$10,000
Total			$60,000